

SEQUENCE LISTING

<110> Wong, Gordon G.
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<210> 15

<211> 1158

<212> DNA

<213> Homo sapiens

<400> 15

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<210> 16

<211> 1880

<212> DNA

<213> Homo sapiens

<400> 16

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<210> 17

<211> 1190

<212> DNA

<213> Homo sapiens

<400> 17

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<210> 18

<211> 2173

<212> DNA

<213> Homo sapiens

<400> 18

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<210> 19

<211> 1364

<212> DNA

<213> Homo sapiens

<400> 19

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<210> 20

<211> 1082

<212> DNA

<213> Homo sapiens

<400> 20

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<210> 21

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 21

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<210> 22

<211> 1204

<212> DNA

<213> Homo sapiens

<400> 22

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<210> 23

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 23

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<210> 24

<211> 895

<212> DNA

<213> Homo sapiens

<400> 24

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ccagccccc aggtcgtctgg ctgcaggccc gagctgagct ggggtccaca gacaatgacc 360

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ttgagcgaca ggaggatgag caggacacag actatgacca cgtcgcggat ggtggcctgc 420
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ccgtgcgggc tgaggaagcc agagacagt acacggaggc cgacctggtc ctccgctccc 540
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<210> 25

<211> 927

<212> DNA

<213> Homo sapiens

<400> 25

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tacaatctca gatgaagaga ttgaacggca actcaaggct ttaggagtag attagtcaaa 840
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<210> 26

<211> 468

<212> DNA

<213> Homo sapiens

<400> 26

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cctccacggc ttccgcgcgc gcgggagggc gcgtgccccg ccgcgcccg ggaccggggg 420
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<210> 27

<211> 488

<212> DNA

<213> Homo sapiens

<400> 27

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ggcttctga ccttgggcta cggctgaccg tttttgtgg tgtactccgt gccatcatgt 60
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cgcgcgcca gatccattcg ttgcggccgg aggggaagct tgggatcatg gaattggccg 180
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atgtcattca attccagtca cctcttctgc aatcatgacc tcttgatgtc tccatggtga 420

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<210> 28
 <211> 1502
 <212> DNA
 <213> Homo sapiens

<400> 28
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 ggtcttccag gagatgctcc tgcacaagtt cccctaccgt atgggtgctg ccctgccacc 480
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 ct 1502

<210> 29
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 29
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 atgattatatt acttatttaa ttaatttatt ttgagatgga gtctcactct gtcacccagg 180
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<210> 30
 <211> 514
 <212> DNA
 <213> Homo sapiens

<400> 30
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tcattccaac tcctaccgag atacagaccc acagagtgcc atccctgaga gaccagaccg 480
ctccccaata ctctcctaaa ataaacatga agct 514

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<210> 31

<211> 581

<212> DNA

<213> Homo sapiens

<400> 31

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ggaggtactg gaggtcatgg tgggtgggtgga ggtgatagtg gtgaagggtga tggaggtggg 180
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aagaaaagtt catttttcatt tttggctggg cactatgggt gatgcctgta accccaactc 300
tttaggaagc ctaggtggaa ggggtggcttg aaccagggag gtcagggctg cagtgaagta 360
tgactgtgcc actgcactcc aaccaggtg acggagcgag accctgtctc ttaaaatatt 420
ttttttacag tgcattttca tgtgtttcaa tctcctagtg tccctgccaa aaatatatta 480
atctgaatca aatcatgggg aaattatgag acaaatcagg tcaaaagaca gtttacaaaa 540
cagttggcct gaacttttca aaactgtcaa catgttcaaa g 581

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<210> 32

<211> 550

<212> DNA

<213> Homo sapiens

<400> 32

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tccgtgccat catgtccgtc ctgacgccgc tgctgctgcg gggcttgaca ggctcggccc 120
ggcggctccc agtgccgcgc gccaaagatcc attcgttgcc gccggagggg aagcttggga 180
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acaataaaat ctatttaaac tttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
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<210> 33

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 33

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aagccccaga ggggcaatga ctggtcacac ctttgagcaa aaagaacaaa ggagaagaaa 180
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<210> 34

<211> 496

<212> DNA

<213> Homo sapiens

<400> 34

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tttttttttt tttttttgga tttacaacaa gtttttttaa taagaaatgg gcaaagccag 60
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gtttgagcct ccacaaataa tgcaaccaag ttttacattt ttaacagccc ttctacatac 180
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tattgtgaca atgactcccg actgttattc tctgtgagaa atgggggggag taaattctta 480
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<210> 35

<211> 478

<212> DNA

<213> Homo sapiens

<400> 35

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tagagcttca gacgccctat ggcgtccgcc tgcacccaac cggcggcctt gagcgctgag 60
caagcaaagg tggctctcgc ggaggtgatc caggcgttct ccgccccgga gaatgcagtg 120
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<210> 36

<211> 811

<212> DNA

<213> Homo sapiens

<400> 36

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ccaagaaatt ccagcggcag catatggact cagacagttc cccagcagc agtccacct 180
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gagtgggttg tgagggtggc cccatgttaa cccctccact ctttctttca ataaaacgcg 720
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<210> 37
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 37
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 taaagcaata cgtgtttgcc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
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<210> 38
 <211> 670
 <212> DNA
 <213> Homo sapiens

<400> 38
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 aaaagacccc 670

<210> 39
 <211> 1095
 <212> DNA
 <213> Homo sapiens

<400> 39
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<210> 40
 <211> 847

<212> DNA

<213> Homo sapiens

<400> 40

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<210> 41

<211> 764

<212> DNA

<213> Homo sapiens

<400> 41

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<210> 42

<211> 788

<212> DNA

<213> Homo sapiens

<400> 42

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<210> 43
 <211> 575
 <212> DNA
 <213> Homo sapiens

<400> 43
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<210> 44
 <211> 1290
 <212> DNA
 <213> Homo sapiens

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<210> 45
 <211> 814
 <212> DNA
 <213> Homo sapiens

<400> 45
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<210> 46

<211> 959

<212> DNA

<213> Homo sapiens

<400> 46

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<210> 47

<211> 1174

<212> DNA

<213> Homo sapiens

<400> 47

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<210> 48

<211> 1157

<212> DNA

<213> Homo sapiens

<400> 48

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<210> 49

<211> 2193

<212> DNA

<213> Homo sapiens

<400> 49

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<210> 50
 <211> 651
 <212> DNA
 <213> Homo sapiens

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<400> 50
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<210> 51
 <211> 1204
 <212> DNA
 <213> Homo sapiens

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<400> 51
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<210> 52
 <211> 1541
 <212> DNA
 <213> Homo sapiens

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<210> 53

<211> 2384

<212> DNA

<213> Homo sapiens

<400> 53

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<210> 54

<211> 1254

<212> DNA

<213> Homo sapiens

<400> 54

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<210> 55

<211> 1127

<212> DNA

<213> Homo sapiens

<400> 55

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1127

<210> 56

<211> 968

<212> DNA

<213> Homo sapiens

<400> 56

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<210> 57

<211> 1002

<212> DNA

<213> Homo sapiens

<400> 57

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<210> 58

<211> 691

<212> DNA

<213> Homo sapiens

<400> 58

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<210> 59

<211> 943

<212> DNA

<213> Homo sapiens

<400> 59

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<210> 60

<211> 2399

<212> DNA

<213> Homo sapiens

<400> 60

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<210> 61

<211> 1516

<212> DNA

<213> Homo sapiens

<400> 61

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<210> 62

<211> 933

<212> DNA

<213> Homo sapiens

<400> 62

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gcagcactcc agccactgct gtctccttag ctgctcacat atggatactt tcacagttca 120
ggattccact gcaatgagct ggtggaggaa taatttctgg atcatcttag ctgtgggtcat 180
catcgttgtc tctgtgggtc tgggcctcat cctgtactgt gtctgtaagt ggcagcttag 240
acgaggcaag aaatgggaaa ttgccaagcc cctgaaacac aagcaagtag atgaagaaaa 300
gatgtatgag aatgttctta atgagtcgcc agttcaatta ccgcctctgc caccgaggaa 360

```

```

ttggccttct ctagaagact cttccccaca ggaagcccca agtcagccgc cgcctacata 420
ctcactggta aataaagtta aaaataagaa gactgtttcc atcccaagct acattgagcc 480
tgaagatgac tatgacgatg ttgaaatccc tgcaaatact gaaaaagcat cattttgaaa 540
cagccatttc ttcttttttg caaaactgaa gaggggttcac acaacttatt ttaaaacaat 600
caagaatggt tgaacttcag taggtctctg ggccctgaaa gccagtgggt attttatgaa 660
gctctataag ataaagcact tcccaaacct tagatgaaga caccctgcg atcggatgac 720
tgcagccaga ggagacacat ggggtgctcg ctctgaggac ttagaggggt cagccttggt 780
ctgttgagga aactttccat ggaaggacc acggggctcc atggctccca cctgtgggaa 840
actactcatt tcttggcatt cttccccct tcattccctt tggtttgcatt ggttctgagt 900
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<210> 63

<211> 1232

<212> DNA

<213> Homo sapiens

<400> 63

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cccagagagg ctcagctgca ctgcccggc tgggagagct ggggtgtgggg aacatggccg 60
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ccctggctgc ccaagagggt cagcagctct cccactgcac gactgtcccc gtgggagcct 180
ccgtcaacat cacctgctcc accagcgggg gcctgctgtg gatctacctg aggcagctcg 240
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acggctccgg caccctggtc ctggtgacag aggaacagtc ccaaggatgg cacagatgct 480
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```

<210> 64

<211> 1207

<212> DNA

<213> Homo sapiens

<400> 64

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cgaacttggc tgggagaatg gctgcagatt tcctgcagcc tgaaagaagc tgagctgtct 180
ctcttgctgc acaacgtggt cctgctctcc accaactacc ttgggacaag gcgctgaatg 240
aaccatggag cggatggcat tgtcctgcag tcgtatagta tagcagtgca ggaacaaaca 300
gcacttgcca gcaaagtctg tgtgtactgt taagtgtgtg ggaggcagag agaggagcag 360
gggcatggg cttcacagca tggcacacat gtgggaactg cagacattcc tctcacagct 420
agaactgaaa caaacctct tgctaggggt ggtccgtgtg aggtgtcatc ctgtccccct 480
cataattact aatagctgga actggcagca gcctctactg ggcttttact gtgatgtgtt 540
caagtcatgt cctaggagtc agcttttgcc agggggatct tatttggtag actgtcact 600
tcatgtacta catctgtggt tttgtgtgct gtagaaattg tgctgtgaac acactcttg 660
ctgagcacat gtgtccgtgc atgtacttgg gtgtttccct ccactccttc tgatatgacc 720
aaaaatcaag ttgttttgg tttgttcacc ttcactggca tgggctaacc acttcttttt 780
caaacctct gaacacctt tctgtatgg taacttgcag gaatattcta ttggaaaaga 840
taacagggaag tacaagtgt tcttgacccc ttcctcaatg tttctagcct tcaactctca 900
ttgtcttttc tgggctgtat tacagccctc tgtggatctt caactctgct gcctccactg 960

```

```

tgatgcagca gtccaactgt aactgacagt ggctgccttc tctggggccat ggatcacacc 1020
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gttgggttta gcttttgtgt gtgcatcagt gacttagagt tctgtaataa cttattgtaa 1140
atgcatgaag cactgttttt aaacccaagt aaagactgct tgaaacctgt tgatggaaat 1200
gactaag 1207

```

<210> 65

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 65

```

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cacctggaac ttgatggagg gagaaaactc cttggatgat ttgaaagaca aagtatttta 180
ccggactgag tttcagaatc gtgaattcaa agccacaatg tgcaacctac tggcctatct 240
aaagcacctc aaagggcaaa acgaggcagc cctggaatgc ttacgtaaag ctgaagagtt 300
aatccagcaa gagcatgctg accaggcaga aatcagaagt ctggcacctt ggggaaacta 360
tgcttgggtc tactatcaca tgggccgact ctacagcgtt cagatttatg tagacaagg 420
gaaacatgtc tgtgagaagt tttccagtcc ctatagaatt gagagtccag agcttgactg 480
tgaggaaggg tggacacggg taaagtgtgg aggaaccaa atgaaagagc gaaggtgtgc 540
tttgagaagg ctctggaaaa gaagccaaag aaccagaat tcacctctgg actggcaata 600
gcaagctacc gtctggacaa ctggccacca tctcagaacg ccattgacct tctgaggcaa 660
gccattcggc tgaatcctga caaccagtac cttaaaagtc tcctggctct gaagcttcat 720
aagatgcgtg aagaagggtg agaggaaggg gaaggagaga agttagttag agaagccttg 780
gagaaagccc caggtgtaac agatgtactt cgcagtgcag ccaagtttta tcgaagaaaa 840
gatgagccag acaaagcgat tgaactgctt aaaaaggctt tagaatacat accaaacaat 900
gcctacctgc attgccaaat tgggtgctgc tatagggcaa aagtcttcca agtaatgaat 960
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gctcatctga agaaagctga tgaggccaat gataatctct tccgtgtctg ttccattctt 1080
gccagcctcc atgctctagc agatcagtat gaagaagcag agtattactt ccaaaaaggaa 1140
ttcagtaaag agcttactcc tgtagcgaaa caactgctcc atctgcggta tggcaacttt 1200
cagctgtacc aaatgaagtg tgaagacaag gccatccacc actttataga ggggtgtaaaa 1260
ataaaccaga aatcaaggg 1279

```

<210> 66

<211> 938

<212> DNA

<213> Homo sapiens

<400> 66

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atccagcatc tcagcagaaa actgcctgac atgaaaagtc ccttgaggaa ctgcatctgc 60
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aggcctgcct tcttctggaa ctggaagtgg gctatcacca tgggcaagcc cttgggtgca 180
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gcttccagtt aagctctgtt tgccaaacaa actattctca gctgcccttt ggccctgcgc 420
tgatgtgttc ctgttgagc cccgcctgcc tgagacagga gcaggcagga gagccttcat 480
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tgtgcttggt gccccaggaa cagccagaga ggacagtgcc ccaggaacag ccagagagga 840
cagtgccac tcacttcttg ttggcagcct cctgtgcagg aagtgccagc cgggcctcga 900
cgcaccagct ggctgtgggt cctgaggagg ggcgggag 938

```

<210> 67

<211> 1369

<212> DNA

<213> Homo sapiens

<400> 67

```

gagcccttgt cagatgtgac agccaccctc ctctttgact tcctggaggt gtgtgggaat 60
gccctcatga agcaatacca ggttcagttc tggaagatgc taattctcat caaagaggac 120
tactttccca gaattgaagc tatcacaagc tcaggacaga tgggctcctt catacgcctc 180
aagcagttct tggagaaatg tttgcaacac aaggacattc ctgtcccca gggctttctg 240
acttctctct tctggcgctc ctgatgtcac tccatcacc accatcaccg ctgctgcaaa 300
gaggcaataa taaaggaact gaagacagct gtatttggga gaagtcagt cagattcaga 360
aatttgccat tatgtatttt tatgtattta tgccttgtga ctaggagagg agattttcat 420
gggtcacaaa attcttggag gtcccttagt agatttggta gttccttaag agatccacgt 480
gataaaataa atggagttgg ctttcttgtt ttttgcaaaa gtgataaaaag gtcttttagca 540
cttgggtctcc tcccttgtct ctagtgtctt tcagaaagtt ggcaatacct taacaaatgc 600
actctgagct ggagggagcc caccatttgc acccacctac ccacctcac ccctgttcag 660
atgaatttcc agaaagagct aaggctcata aggttccctt ttaagtatta ttaaatagtt 720
gaggccagat acttacatgc aagtctgggt tatggttgtt ttgcctttct cagcttgtga 780
agtcattcta aagctagagg aagtatgtga tatacacatg gactaaggct cagggtgacac 840
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ccttttttgt ttttgttttg ttttgtttct tttctgtttg aattaagatg ggctaagatg 1020
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tactgcagag gcagtggcca tggatctgtt cctctgtgct aaatgtcttg tggcaggggtg 1260
tgtttgtggg ggagtgttca ctggtactct tgagtggcct gaagtgacct attctatgaa 1320
ttgttaatta agtgccaaa aaaaattaat aataaagctt ggttttttcg 1369

```

<210> 68

<211> 857

<212> DNA

<213> Homo sapiens

<400> 68

```

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ggtccgtctt cttcctgctg ctgccgggac cttctgcggc cgatgagaag aagaaggggc 120
ccaaagtcac cgtcaagggt tattttgacc tacgaattgg agatgaagat gtaggccggg 180
tgatctttgg tctcttcgga aagactgttc caaaaacagt ggataatttt gtggccttag 240
ctacaggaga gaaaggattt ggctacaaaa acagcaaatt ccatcgtgta atcaaggact 300
tcatgatcca gggcggagac ttcaccaggg gagatggcac aggaggaaa agcatctacg 360
gtgagcgctt ccccgatgag aacttcaaac tgaagcacta cgggcctggc tgggtgagca 420
tggccaacgc aggcaaagac accaacggct ccagttctt catcacgaca gtcaagacag 480
cctggctaga tggcaagcat gtggtgtttg gcaaagttct agagggcatg gaggtggtgc 540
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ctgcaactggc cccggtgctg gcactctggt gagcggacct actccctca cattccacag 780
gcccattggac tcaacttttgt aacagactcc taccaacact gaccaataaa aaaaaatggg 840
ggtttttttt tttttttt

```

<210> 69

<211> 824

<212> DNA

<213> Homo sapiens

<400> 69

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ccaaagtcac cgtcaagggt tattttgacc tacgaattgg agatgaagat gtaggccggg 180
tgatctttgg tctcttcgga aagactgttc caaaaacagt ggataatttt gtggccttag 240
ctacaggaga gaaaggattt ggctacaaaa acagcaaatt ccatcgtgta atcaaggact 300
tcatgatcca gggcggagac ttcaccaggg gagatggcac aggaggaaa agcatctacg 360
gtgagcgctt ccccgatgag aacttcaaac tgaagcacta cgggcctggc tgggtgagca 420

```

```

tggccaacgc aggcaaagac accaacggct cccagttctt catcagcaca gtcaagacag 480
cctggctaga tggcaagcat gtggtgtttg gcaaagttct agagggcatg gaggtggtgc 540
ggaaggtgga gagcaccaag acagacagcc gggataaacc cctgaaggat gtgatcatcg 600
cagactgctg caagatcgag gtggagaagc cctttgccat cgccaaggag tagggcacag 660
ggacatcttt ctttgagtga cctgtctgtg aggccctgta gtccgccaca gggctctgag 720
ctgcactggc cccggtgctg gcactctggt gagcggaccc actccctca cattccacag 780
gccccatggac tcacttttgt aacaaactcc taccaact gacc 824

```

<210> 70

<211> 928

<212> DNA

<213> Homo sapiens

<400> 70

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agacaacatt tgatcccaag aaaaccagaa tggaaacctt tcacttcaaa aactcagtta 120
taaaagtgcc catgatgaat agcaagaagt accctgtggc ccatttcatt gaccaaactt 180
tgaaagccaa ggtggggcag ctgcagctct cccacaatct gagtttggtg atcctggtac 240
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ccatggccct gccatgctct ccaaaccact ttttgcagct ttctctagtt caagttcacc 900
agactctata aataaaacct gccagccc 928

```

<210> 71

<211> 672

<212> DNA

<213> Homo sapiens

<400> 71

```

caccaccacc aaaaaaaaaa aaagccctca gaaaatttct cacaataaag gcaactaatg 60
cctgatatct caaaatcctt tacaaaagga gatagttcta gtcaaggagt tttgggtatg 120
ttactttttt ttcttctttt tcttttcata tgccctccatc ttaagtgc aa tttcttcagc 180
tgtaagagct cccagtttct tattctttgc tttcttaacc ttttcttga tgctggccac 240
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gattttacca agtaaaacaa agaatatatg ttttaacaaag aatatatgtt taaggcagtt 360
aacttcagag tattctttata attgaataat tgaaagggtg tcacagtata aaatataaaa 420
acacttgccct aaagcagtta gaaaatttct cagattaaga taaaacaaat cataaaatac 480
tttatatatt agtacaagta tacataaaaa tggcataaat ggcataattg aaccaattac 540
tggattcaac tatattaaga ctatttcctt aaatcctact tcagactaaa ttattttacc 600
tacattcttt tccatatttt ggaacttctg agtcattatt ttccatcttg cacattaaaa 660
taatttaaaa tt 672

```

<210> 72

<211> 518

<212> DNA

<213> Homo sapiens

<400> 72

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caagaagaca gcgacagctg tggcgactg caaacgcggc aatgggtctc tcaagggtgaa 120
cgggcccggc ctggagatga ttgagccgcg cagctacag tacaagctgc tggagccagt 180
tctgcttctc ggcaaggagc gatttgctgg tgtagacatc cgtgtccgtg taaaggggtg 240
tggtcacgtg gccagattt atgctatccg tcagtccatc tccaaagccc tgggtggccta 300
ttaccagaaa tatgtggatg aggccttccaa gaaggagatc aaagacatcc tcatccagta 360

```

```

tgaccggacc ctgctggtag ctgaccctcg tcgctgcgag tccaaaaagt ttggaggccc 420
tgggtgcccgc gctcgtacc agaaatccta ccgataagcc catcgtgact caaaactcac 480
ttgtataata aacagttttt gagggatttt aaagtccc 518

```

```

<210> 73
<211> 1519
<212> DNA
<213> Homo sapiens

```

```

<400> 73
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tcttcaaagg caacaatcgc tggaaacaga gtgtagagct gtgcaagaaa gacagccttt 180
acaaggatgc aatgcagtat gcttctgaat ctaaagatac tgaattggct gaagaactcc 240
tgcagtgggt tttgcaggaa gaaaaaagag agtgctttgg agcttgctg tttacctgtt 300
acgatctttt aaggccagat gtcgtcctag aaactgcatg gaggcacaat atcatggatt 360
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atgcttcaga atcactgaga aaagaagaag aacaagctac agagacacaa cccattgttt 480
atggtcagcc ccagttgatg ctgacagcag gaccagtggt tgccgtccct cccagggcac 540
cttttggtta tggttatacc gcaccaccgt atggacagcc acagcctggc tttgggtaca 600
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accactttct cagtttataa tgggggaaac aggcaacgtg ttcttgtaac ctttatttca 720
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gtgccaaaca agacaacact aatcagcaca tcgtacactg gattgcagtg cttcccagat 1140
tattgaaaaa tgttacagac aacttgccctg tattttttaa tgagcgtaaa aggccctcta 1200
acctatgcag gtttccccat tatgcatata gaaaatgcta gtatgttttg ctcacttcat 1260
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gtttgtgtat gttggatatt gtggtgtttt agatcactga gtgtacagaa gagagaaatt 1440
caaacaaaat attgctgttc ttcagttttg tttgtggaat ttnaaattac tcaaatttaa 1500
aataaattac tggactgtg 1519

```

```

<210> 74
<211> 760
<212> DNA
<213> Homo sapiens

```

```

<400> 74
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ggcgccgtgc gctgcgacac acctgccaac tgcacctatc ttgacctgct gggcacctgg 120
gtcttccagg tgggctccag cggttcccag cgcgatgtca actgctcggt tatgggacca 180
caagaaaaaa aagtagtggt gtaccttcag aagctggata cagcatatga tgaccttggc 240
aattctggcc atttcaccat catttacaac caaggctttg agatttgtgt gaatgactac 300
aagtggtttg ccttttttaa ggatgtcact gattttatca gtcatttggt catgcagctg 360
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atctgttgag ggactctttt aaaaccacag ccatgaacag acgttggggc taagagacag 480
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aaggcagctg ccctcctgaa cactcccttg gaaaacagta aacatcattt tggaatgtga 660
acaaccagag actacacagg agaaaggaaa aaaaaattct gaagatgcaa aatcttgggt 720
ggcttcaccg ttcagttttt taataaaaag aacaatatac 760

```

```

<210> 75
<211> 344
<212> DNA
<213> Homo sapiens

```

<400> 75

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<210> 76

<211> 3684

<212> DNA

<213> Homo sapiens

<400> 76

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<210> 77

<211> 2817

<212> DNA

<213> Homo sapiens

<400> 77

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<210> 78

<211> 2066

<212> DNA

<213> Homo sapiens

<400> 78

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<210> 79

<211> 2044

<212> DNA

<213> Homo sapiens

<400> 79

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<210> 80

<211> 1035

<212> DNA

<213> Homo sapiens

<400> 80

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<210> 81

<211> 1113

<212> DNA

<213> Homo sapiens

<400> 81

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<210> 82

<211> 1574

<212> DNA

<213> Homo sapiens

<400> 82

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<210> 83

<211> 1817

<212> DNA

<213> Homo sapiens

<400> 83

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<210> 84

<211> 1079

<212> DNA

<213> Homo sapiens

<400> 84

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<210> 85

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 85

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<210> 86

<211> 549

<212> DNA

<213> Homo sapiens

<400> 86

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<210> 87

<211> 1539

<212> DNA

<213> Homo sapiens

<400> 87

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<210> 88

<211> 1161

<212> DNA

<213> Homo sapiens

<400> 88

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<210> 89

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 89

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<210> 90

<211> 826

<212> DNA

<213> Homo sapiens

<400> 90

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<210> 91

<211> 395

<212> DNA

<213> Homo sapiens

<400> 91

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<210> 92

<211> 772

<212> DNA

<213> Homo sapiens

<400> 92

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<210> 93
<211> 602
<212> DNA
<213> Homo sapiens

<400> 93
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<210> 94
<211> 1085
<212> DNA
<213> Homo sapiens

<400> 94
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<212> DNA

<213> Homo sapiens

<400> 96

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<211> 2082

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 1322

<212> DNA

<213> Homo sapiens

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<210> 103

<211> 1598

<212> DNA

<213> Homo sapiens

<400> 103

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<210> 104

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 104

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<211> 2314

<212> DNA

<213> Homo sapiens

<400> 105

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<210> 106

<211> 1259

<212> DNA

<213> Homo sapiens

<400> 106

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<210> 107

<211> 1990

<212> DNA

<213> Homo sapiens

<400> 107

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<211> 1021

<212> DNA

<213> Homo sapiens

<400> 108

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<211> 1603

<212> DNA

<213> Homo sapiens

<400> 109

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<210> 110

<211> 1456

<212> DNA

<213> Homo sapiens

<400> 110

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<210> 111

<211> 1615

<212> DNA

<213> Homo sapiens

<400> 111

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<210> 112
 <211> 621
 <212> DNA
 <213> Homo sapiens

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<400> 112
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<210> 113
 <211> 1331
 <212> DNA
 <213> Homo sapiens

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<400> 113
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cgcgatgagc tagtccggga cctggaccac aaggagcgga tcgccctgga ggaggacgag 1080
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<210> 114

<211> 1590

<212> DNA

<213> Homo sapiens

<400> 114

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<210> 115

<211> 2410

<212> DNA

<213> Homo sapiens

<400> 115

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<210> 116

<211> 984

<212> DNA

<213> Homo sapiens

<400> 116

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aagggtggcg ggtcacttgc ggtcaggagt tcaagaccng cctggccaac atggtggccn 960
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<210> 117

<211> 1048

<212> DNA

<213> Homo sapiens

<400> 117

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aagctcgcgg cccggggcgc catgcgctgg gaacggggtg cgcagggttct acgagaggac 180

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<210> 118

<211> 1965

<212> DNA

<213> Homo sapiens

<400> 118

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<210> 119

<211> 574

<212> DNA

<213> Homo sapiens

<400> 119

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<210> 120

<211> 1334

<212> DNA

<213> Homo sapiens

<400> 120

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<210> 121

<211> 989

<212> DNA

<213> Homo sapiens

<400> 121

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<210> 122

<211> 2085

<212> DNA

<213> Homo sapiens

<400> 122

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<210> 123

<211> 1816

<212> DNA

<213> Homo sapiens

<400> 123

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<210> 124

<211> 2222

<212> DNA

<213> Homo sapiens

<400> 124

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<210> 125

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 125

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<210> 126

<211> 981

<212> DNA

<213> Homo sapiens

<400> 126

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<210> 127

<211> 1343

<212> DNA

<213> Homo sapiens

<400> 127

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<210> 128

<211> 1615

<212> DNA

<213> Homo sapiens

<400> 128

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 <211> 1099
 <212> DNA
 <213> Homo sapiens

<400> 129
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<213> Homo sapiens

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<211> 2108

<212> DNA

<213> Homo sapiens

<400> 134

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<211> 1362

<212> DNA

<213> Homo sapiens

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<211> 1505

<212> DNA

<213> Homo sapiens

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<210> 139

<211> 1579

<212> DNA

<213> Homo sapiens

<400> 139

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<210> 140

<211> 1641

<212> DNA

<213> Homo sapiens

<400> 140

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aaaaaaaaata aaaaaaaaaa a 1641

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<210> 141

<211> 1492

<212> DNA

<213> Homo sapiens

<400> 141

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<210> 142

<211> 1816

<212> DNA

<213> Homo sapiens

<400> 142

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<210> 143

<211> 2230

<212> DNA

<213> Homo sapiens

<400> 143

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tataaagcac agttatacat acagcatata tgcagacata taatttgtct atggtattaa 180
aatttcatgc atggggcaat taggaaaaaa gcgctctaaa atgctcttag ggagatgatg 240
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<210> 144

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 144

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<210> 145

<211> 994

<212> DNA

<213> Homo sapiens

<400> 145

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<210> 146

<211> 1913

<212> DNA

<213> Homo sapiens

<400> 146

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caatttgggg cctcaaattt gactctgcct caaaaaaag aaatatatcc tatgcagagt 1860
tacagtcaca aagttgtgta ttttatgtta caataaagcc ttcctctgaa ggc 1913

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<210> 147

<211> 982

<212> DNA

<213> Homo sapiens

<400> 147

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```

<210> 148

<211> 1078

<212> DNA

<213> Homo sapiens

<400> 148

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gattgtagaa tgtcgtgctg tcaccagaaa gctgctgttt tgggttctgc attgagccaa 60
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tagaatgttc tgagccgtct gagggccttc atgcccggcag cagctagcaa agccagaaaag 180
caagtctaac aggatctaag atgaccatca ggagaaggag tttgagactg tgtatgcaac 240
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<210> 149

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 149

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gagaccagcc tggacaacat ggtgaaaccc tgtctctact aaaaacagaa aaattagccg 180
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tgaacctggg atggtgaggg gctgttgggc tggctccgtc gcagagggga gatgggaaag 300
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ttgggggccc ggagctctcc aggaaagcca agctggcggc caccgcaggg gccctccaca 480
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<210> 150

<211> 858

<212> DNA

<213> Homo sapiens

<400> 150

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ctcgctcgc ggcccggtgg gtgcggcccc ccaccgttgc cgccatgccc atgaagggcc 120
gcttccccat ccgccgtacc ctgcaatata tgagccaggg gaacgtggtg ttcaaggact 180

```

```

ccgtgaaggt catgacagtg aattacaaca cgcattgggga gctggggcgag ggcgccagga 240
agtttgtgtt tttcaacata cctcagattc aatacaaaaa cccttgggtg cagatcatga 300
tgtttaagaa catgacgccg tcacccttcc tgcgattcta cttagattct ggggagcagg 360
tcctggtgga tgtggagacc aagagcaata aggagatcat ggagcacatc agaaaaatct 420
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cagccaactt cggccctcga aagtactgcc tgcgggagtg catctgtgaa gtggaagggc 540
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ctgaccagtg gggagattgg aatgggatta ctttgcccca gggaagcccc tggttctgtc 720
cctggagact ctggaaatcc ttttgcatla aaaggacttt acacacctgt gtaaaaggat 780
gtgggagagg aggggtctgaa gctgagctgc taaatgaata tccctgctct gctgggtcaat 840
aaaacgcttc ctaatagc
858

```

<210> 151

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 151

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tttgaagttt ccaaagatga aaacatctac tctgaagaga cctgaatgga caagagatgt 180
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aaactaaaca gactctcctc atatgttcca gcaattgtat tccttgggtat ttatccaaag 480
gagatgaaaa cttatgtcca caaaaaacc tgcattgtgga tgtttatggc agttttattc 540
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tgtgtgtacat cttgacaatg ggatattatt cagcactaaa aggaaatgag ctatcaagcc 660
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1154

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<210> 152

<211> 2290

<212> DNA

<213> Homo sapiens

<400> 152

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agagctgaca agcaacgtct taaaaacagg cgtggtgcgc tgctgcgtgg gacagtgcaa 180
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ccaagctgga cctgccattt ctccactccc tacagacagc cagtctccac ttgcctcccc 600
tctggatgta tctggtcagg gaagtgggg atgttctttt gataaaaaaa aaaaaaaa 660
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aaaaaaaaa aaaaaggcg gccgctttt ttttttttt tttttcgggg 780
aatgagaaaa taactttatt tcattggggg gagcggcccg atgtccagcc taagaacttt 840
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gcatgcctgt agtcccagcc actcgggagg ccaaggcagg agaatagctt gaacccggga 2220
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actcgtctc 2290

```

<210> 153

<211> 446

<212> DNA

<213> Homo sapiens

<400> 153

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tgtctgtctt tccatgaaat gaaatagtgg ctaaaagcctt gaaagaggca agactacaat 180
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ttttccccc ttaaactgca ttgcctattc ttttttcttg acatgctatc aggtatcagt 360
gtgttgaata catactgctt gtgtatcaga cttacgttac tgtcatcacc attaaaagaa 420
ttgcagcctt gtgccccatg accttc 446

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<210> 154

<211> 2732

<212> DNA

<213> Homo sapiens

<400> 154

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gtgcctgtgg gaagacctgc ctctcatcgc tcttcagcaa ggatcagttt ccggaggtct 180
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gccaggact gcattgtttt ctagccccga ggtgggtggc cgggccctcc ctcccagcgc 840
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gaccttcccc aaaggatggt cacacaccag cactttatac acttctggct cacaggaaag 960
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<210> 155

<211> 582

<212> DNA

<213> Homo sapiens

<400> 155

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aatacagaaa ttagccgggt gtggtggtgg gtgtctgtag tcccagctac tcgggagggt 480
gagacaggag aattgcttga accggagagg tggaggctgc agtgagctaa gatcatgcca 540
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<210> 156

<211> 731

<212> DNA

<213> Homo sapiens

<400> 156

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cgcagctcag taagaaaatg cttttgagct ataaccagg ttgagtacca ttggtacatt 180
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agctgtgtga ctttgggaaa attacttaac ctttctgggc cttagctttg ctacctattc 420
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ttgtcactgg tagagccatg atgggagctc ttactacatt gctatttgta ctgagttaaa 720
tagtgtttctc c                                     731

```

<210> 157

<211> 868

<212> DNA

<213> Homo sapiens

<400> 157

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gccccaggac aggcggcctc cgtaacgtgt gtgggacacg atggtggaag taaaagtgtg 180
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<210> 158

<211> 857

<212> DNA

<213> Homo sapiens

<400> 158

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<210> 159

<211> 1456

<212> DNA

<213> Homo sapiens

<400> 159

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<210> 160

<211> 585

<212> DNA

<213> Homo sapiens

<400> 160

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<211> 592

<212> DNA

<213> Homo sapiens

<400> 161

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<210> 162

<211> 3760

<212> DNA

<213> Homo sapiens

<400> 162

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<210> 163
 <211> 766
 <212> DNA
 <213> Homo sapiens

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<400> 163
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<210> 164
 <211> 3999
 <212> DNA
 <213> Homo sapiens

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<210> 165

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 165

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<210> 166

<211> 366

<212> DNA

<213> Homo sapiens

<400> 166

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aattttaagc	atgttcagt	gcagctcccc	tccagtttca	gtgtcactgt	taaaatttat	240
caaaaagcaa	cttcactagg	ggttttctta	agggataaag	gccttttaca	gaagctaaac	300
ccttccccac	atgtggtaga	atgtgctctt	ctatatctac	tcctcaataa	agcatgttct	360
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<210> 167

<211> 1926

<212> DNA

<213> Homo sapiens

<400> 167

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gttgcc						1926

<210> 168
 <211> 1278
 <212> DNA
 <213> Homo sapiens

<400> 168
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 agggtagagt gaatcatgag agtctgtgtt tagctgtctc aggggactac attcatttga 240
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 gattgatgta gcttgtgcaa agggcaacag gaaggattct caagaatgtt ggaaatgagg 420
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 ataagattat ttattcatag atgtgtctta ctctatgaga tattttgtca gtgtgatact 540
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 gctgagacgg gtagatcacc aggtcatgag ttcgagatca gcctggccaa catggtgaaa 720
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 tcaagtttga ccccaaagcc tgggtagtaa atcattacac tttacttctg atatatattc 1200
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<210> 169
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 169
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 tgagaagaat agaagaaaaa aagtttgtat atatttttaa aaaaattgtt ttaaaagtca 120
 gtttgcaaca tgtctgtacc aagatggtag tttgccttaa ccgtttatat gcactttcat 180
 ggagactgca atacgttgct atgagcactt tctttatcct tggagtttaa tcctttgctt 240
 catctttcta cagtatgaca taatgatttg ctatgttgta aaatctttgt aaaaaatttc 300
 tatataagaa tatttttgaaa atctt 325

<210> 170
 <211> 594
 <212> DNA
 <213> Homo sapiens

<400> 170
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 aacatggcaa aaatctccag cctacagag actgagcggg gcatcgagtc cctgattgct 180
 gtcttccaga agtatgctgg aaaggatggg tataactaca ctctctccaa gacagagttc 240
 ctaagottca tgaatacaga actagctgcc ttcaaaaaga accagaagga ccctggtgtc 300
 cttgaccgca tgatgaagaa actggacacc aacagtgatg gtcagctaga tttctcagaa 360
 tttcttaatc tgattgggtg cctagctatg gcttgccatg actccttctt caaggctgtc 420
 ccttcccaga agcggacctg aggacccctt ggccctggcc ttcaaaccaca ccccttttcc 480
 ttccagcctt tctgtcatca tctccacagc ccacccatcc cctgagcaca ctaaccacct 540
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<210> 171

<211> 1061

<212> DNA

<213> Homo sapiens

<400> 171

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acggagctgg agaaggcagt cattgtcctg gtggaaaact tctacaaata tgtgtctaag 180
tacagcctgg tcaagaacaa gatcagcaag agcagcttcc gcgagatgct ccagaaagag 240
ctgaaccaca tgctgtcgga cacagggaac cggaaggctg cggataagct catccagaac 300
ctggatgcca atcatgatgg gcgcatcagc ttcgatgagt actggacctt gataggcggc 360
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cctcctcctg ttgcttgaaa taatgatgat ataaaggctg gatttggagt ttgtatcccc 1020
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<210> 172

<211> 347

<212> DNA

<213> Homo sapiens

<400> 172

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actctcacag gtagaatgaa ctgtgtactg gccacatatg gaagcattgc attgattgtc 180
ttatatattc agttaaggct caaaaaaact ccagctgtga aagcaacata aatggatttt 240
aaactgtcta cggttcttaa cctcatctgt taagttccca tgctggaga agctaattgc 300
aactcatcat gtgataattc aatttgtaga ataaattatg aacctgc 347

```

<210> 173

<211> 694

<212> DNA

<213> Homo sapiens

<400> 173

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acaccgcgac tcgtactgct cctacatggg ccacttcgac cttctcaact acttcgccat 240
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ttgtggaccg ccagccgaca agcccgagga gaactgagac tctgccttac caccgcagt 360
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gcatggcgct ggagttagat gggatttggc gtctcgcttt tggctaattg attgtcattg 660
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<210> 174

<211> 771

<212> DNA

<213> Homo sapiens

<400> 174

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tactgcccgg  ctgaacggag  ctgccgtcgc  cactgtttgg  ctgcttggtg  gcggggaggc  180
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tgaggagatc  tgtctacttt  tcttatcctg  attcaaattg  aatgccagta  tggcaactcc  360
taggatttgt  cacgaatggg  aagccaagt  ccattctcaa  aatttcaggt  cttaaactctg  420
gagaaggaag  ccaacatcct  tttggagcca  tgaatattgt  ccgaactcca  tctgttgctc  480
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acaattttgc  ttcattcattt  gctgtctctc  aggcccagat  gacaccaagc  ccatctgaaa  660
tgttcattcc  ggcaaagtgt  gttctgaaat  ggtatgaaaa  ctttcaaaga  cgactagcac  720
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<210> 175

<211> 552

<212> DNA

<213> Homo sapiens

<400> 175

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tcgcaggtgg  catgacagag  gctctgaggc  ctgatggctg  gaccctgctc  actgctgttg  180
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<210> 176

<211> 401

<212> DNA

<213> Homo sapiens

<400> 176

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cagaaagtga  tgcgcaatac  cagttcactg  gtattaaaaa  atatttcaac  tcttatactc  180
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tgtctacggt  tcttaacctc  atctgttaag  ttcccatgcc  tggagaagct  aatgccaaact  360
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<210> 177

<211> 396

<212> DNA

<213> Homo sapiens

<400> 177

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aatctgatgc  ttccaccaga  tgtctggatg  aaaataacta  tgacagggaa  aggtgttcca  180
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gaaagaacgg  agtgaagcca  tttatgccta  cggcagcaga  aagagatgaa  atcttgagag  300
cagtgggaaa  tatgccctat  tgaatgtttg  cattaaaagt  gtttatataa  cttagaagca  360
gatgaatatt  tctaataaat  gattgctgta  atattc  396

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<210> 178

<211> 949
 <212> DNA
 <213> Homo sapiens

<400> 178
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<210> 179
 <211> 1067
 <212> DNA
 <213> Homo sapiens

<400> 179
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<210> 180
 <211> 675
 <212> DNA
 <213> Homo sapiens

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 caaatccaag ccggcagtga gccgcgacaa ggcctcagac gccagcgaca agcagcgcca 480

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ggaggcccgcc aagagactcc tggcgggccaa gcggggcagct tctgtgcggc agaactcagc 540
caccgagagc gcagacagca tcgagattta tgtcccgag gccagacca ggctctgaga 600
ccatgcagga ggaaagaaac gatttttaaat cattaaaaac acaaaaacta agtgcgaaac 660
gaacagagtt ttcac 675

```

<210> 181
 <211> 581
 <212> DNA
 <213> Homo sapiens

```

<400> 181
acttccggcc agatcgccgg atttccgctg agtgaccctt acaagtcctt cttgatcctg 60
aactgggtta ggtgccgctg ttgctgctcg tgttgaatct agaaccgtag ccagacatgg 120
gactggagga cgagcaaaag atgcttaccg aatccggaga tcctgaggag gaggaagagg 180
aagaggagga attagtggat cccctaacaa cagtgcgaga gcaatgcgag cagttggaga 240
aatgtgtaaa ggcccgggag cggctagagc tctgtgatga gcgtgtatcc tctcgatcac 300
atacagaaga ggattgcacg gaggagctct ttgacttctt gcatgcgagg gaccattgcg 360
tggcccacaa actctttaac aacttgaaat aaatgtgtgg acttaattca cccagtcctt 420
catcatctgg gcatcagaat atttccttat ggttttggat gtaccatttg tttcttattt 480
gtgtaactgt aagttcacat gaacctcatg ggtttggtt aggctggtag cttctatgta 540
attcgcaatg attccatcta aataaaagtt ctatgatctg c 581

```

<210> 182
 <211> 931
 <212> DNA
 <213> Homo sapiens

```

<400> 182
gggatctgga gcagcagctg caggatgagc tcctggagggt ggtctcagag ctccagacgg 60
ccaagaagac gtaccaggca tatcacatgg agagcgtgaa tgccgaggcc aagctccggg 120
aggccgagcg gcaggaggag aagcgggcag gtccgcacag tcgaagccac acctgggtctg 180
ttttctgtgc actgtagcct tagtgtcacc tttcttcttg tgtctcctta tggtagactc 240
cagcgggttg cttttttatc atttctactg aagttgggae attcaacccc agaaattgac 300
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acagggtttt ttcatttttg tgggggctag aaaaaacata aaatgaggca gttaaataat 420
aatagttaat gaaggtgtgc tacagaaaat aatctgggtg tcttgctaac tttgcccttc 480
actggttgctt aattgtgaac agccaaaagc tatatgttat ggcttattgt gtgaaggtaa 540
ctaagaagtg gtgttccatg acttcagagt acatccatgc ggagtccatt atttgagttt 600
gacatttaat aactttgctg gaaaatctgt aaaaaagaaa aacaagtttg ctagtgacta 660
agccccgcat atgtgagtga agtacttca ggcacgctgc ctctggtaa cagctatgca 720
gggagggagg acccactctg ctacacttct gatccccctt ggttttacta cccaaatcta 780
aatagatact tttgataata gataactgct cttttactaa gacatagtct ctacctatag 840
aaatgtattt tgaaaacact tattttacac agcaattttg tatccattta aactaacctt 900
ttatcaataa agcactattg tttagatatt c 931

```

<210> 183
 <211> 1016
 <212> DNA
 <213> Homo sapiens

```

<400> 183
agcagctgaa gactctccac ctataactgt atcgtgccac attcagattt ttagaatgcc 60
cctcttgatc tggccatata tacattaaat gctattttct tcaagcagtg agacaaagct 120
gagagacgat aggttttaaag attggttaca aattctgatg aagactggtc cttgaagtct 180
ttgggctggt acatggccct ttggaagcaa taggtcatca ctgtgaacaa cttctgtagg 240
tactggtttc catacgaagg gaatacatct tgatgacttt acatgaagtc ttaactttat 300
ttgctgttta atgtaagttg gtcaagggtc ttattgagca gaagaaactt gggaaatgaa 360
agcactgtta ctgggaccac agtttttgag cctctgctgt caatggaaac agacacttca 420
aaaatgctct ccacggaggc tcagaagaga tgaaaagaca ggaaaaggag ctgaaaagat 480
gaaaaaaaaa aaaaaaaaaa aaaaaggaaa atcaaggcct tctacaaaac aaaaactttg 540
gacagcatct tgattcctcc tccacctctt ccatattagc cttgagactc tttctgaaaa 600

```

```

taaaaaggag ggagttcttc cttgtcataa ttatcccatc cttagtgtaa tcactatcca 660
aaattagtct ggaaccttct aaatcaattc catagttctt gggcaatatt ttgagaaatt 720
cgcttaatgt gacttgacag aatctctggg ctggatggta ttagagcgat tacagtagta 780
ccaacttcag gccaaagccc aaagtgtaaa aatcgtgttt ctgggctaca ttctgttatg 840
ccagagttta tatagtgtct ggtaacatgt aagccttttt gaaatgaagt ctcctaggaa 900
gattgaaaac atcagcaatc ccttgatacc accagcaatc catctaccac ctgtacattt 960
tcactacccc aatatnccan ctccttaaga gaaaggaatt tggttccctg tcacac 1016

```

<210> 184

<211> 413

<212> DNA

<213> Homo sapiens

<400> 184

```

gtttcatctt ctgggattat tgttcaagac cagcctctaa tgggaggtga aacgggtacga 60
tgggtctcaac acctttcttc tgaactgtaa tacatatcac aaaaagtaca tccataattc 120
agggcaattg tcagtctttt tagagaaggg gccagggtgg aacaatccca gtgagtaaat 180
tatttctcag cgtggacttc tctgcatgtc gggcttaagg tcaccagccg ggcagggtgg 240
aaggagcttg cctctttgag aaaccaagga gtcccagtga tctgttacca tttggttatg 300
acttctaaag agccaaatgc tattccttca agcctgtttt gcaggcagaa aataccagca 360
gtgtcattta ggggttcctt tgatgatgac tactgctgtt aactgacctc agc 413

```

<210> 185

<211> 961

<212> DNA

<213> Homo sapiens

<400> 185

```

ttgatattata aatagttgtc agttcacata gcaatttaat caagtaatca ttaattagtt 60
accccttata tataaatata tgtaaatcaat ttcttcaaat agcttgctta catgataatc 120
aattagccaa ccatgagtca tttagaatag tgataaatag aatacacaga atagtgatga 180
aattcaattt aaaaaatcac gttagcctcc aaaccattta attcaaatga acccatcaac 240
tggatgccaa ctctggcgaa tgtaggacct ctgagtggct gtataattgt taattcaaat 300
gaaattcatt taaacagttg acaaactgtc attcaacaat tagctccagg aaataacagt 360
tatttcatca taaaacagtc ccttcaaaca cacaattgtt ctgctgaaga gttgtcatca 420
acaatccaat gctcacctat tcagttgtct tgtggctcagt gtggctgcat agcagtggtg 480
tccatgaaag gagtcatttt agtgatgagc tgccagtgcca ttcccaggcc aggtgtgcgc 540
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ggggtcctcc agggagctga cccagaggtg gaggccacgg aggcagggtc tctggggact 840
gtcggggggt acagagggag aaggctctgc aagagctccc tggcaatacc cccttgtgta 900
attgctttgt gtgcgacagg gaggaagttt caataaagca gcaacaagct tcaaaaaaaaa 960
g 961

```

<210> 186

<211> 712

<212> DNA

<213> Homo sapiens

<400> 186

```

tgccaacatg gtgttcaggc gcttcgtgga gg+tgcccg gtggcctatg tctcctttgg 60
acctcatgcc ggaaaattgg tcgcgattgt agatgttatt gatcagaaca gggctttgg 120
cgatggacct tgcactcaag tgaggagaca ggccatgcct ttcagtgca tgcagctcac 180
tgatttcata ctcaagtttc cgcacagtgc ccaccagaag tatgtccgac aagcctggca 240
gaaggcagac atcaatacaa aatgggcagc cacacgatgg gccagaaga ttgaagccag 300
agaaaggaaa gccaaagatga cagattttga tcgtttttaa gtatgaagg caaagaaaat 360
gaggaacaga ataatcaaga atgaagttta gaagcttcaa aaggcagctc tcctgaaagc 420
ttctcccaaa aaagcacctg gtactaaggg tactgtgtgt gctgtgtgtc ctgtgtgtgc 480
tgctgtgtgt gctgtgtgta aagttccagc aaaaaagatc accgccgcga gtaaaaaaggc 540

```

```
tccagcccag aaggttcctg cccagaaagc cacaggccag aaagcagcgc ctgctccaaa 600
agctcagaag ggtcaaaaag ctccagccca gaaagcacct gctccaaaagg catctggcaa 660
gaaagcataa gtggcaatca taaaaagtaa taaaggttct ttttgacctg tc 712
```

<210> 187

<211> 391

<212> DNA

<213> Homo sapiens

<400> 187

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ggaaacctct gcgccatgag agccaagtgg aggaagaagc gaatgcgcag gctgaagcgc 60
aaaagaagaa agatgaggca gaggtccaag taaaccgcta gcttggtgca ccgtggaggc 120
cacaggagca gaaacatgga atgccagacg ctggggatgc tggtagaagt tgtgggactg 180
catgctactg tctagagctt gtctcaatgg atctagaact tcatcgccct ctgatcgccg 240
atcacctctg agaccacac tgcctcataaa caaaatgcc atgttggtcc tctgccctgg 300
acctgtgaca ttctggacta tttctgtgtt tatttggtgg cgagtgtaac aaccatataa 360
taaatacact cttccgctgt tttagctgaa g 391
```

<210> 188

<211> 717

<212> DNA

<213> Homo sapiens

<400> 188

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aacattttcc cccactcct cccttgatct ttttggtttt actttaatta agccctgcga 60
gaatgctgga taaatgcctt gaagttagca ggggtgtattt ttttagcgaa tatgatttgc 120
atgtcttgcc aggagttaag cggcctctgg ggtggtggg aaatacttta tttctttcca 180
tttatttttt gtggggcggg gataggggag ggcattgaag ttctacaatt ctggaatagt 240
tagttgatgg tacatagtta acttggtctt gggtacatat tggactttaa caactgaaga 300
atctatgcgt gtcattttaa gaaaagttgc agaacaagca attggcttag atatacaatc 360
tggaataata ttctgtgccc catattttta tgtaattgta taactgggag caaaaatata 420
ttctgctttt caactgtagg tgctccagac ttgctctccg tactaacac taaatgtgct 480
gttttccttg tttttcatca aacattttaag acaaacttag acctttctgt aaattatctt 540
ttaattttct agcaaaatct aaaaggggaa gaaaaaagtc catgaaaact aaaacttttc 600
atgttttttag ccagtgtgaa gataataaac cctgactgta gaaggtgtgt tttcatgcaa 660
actatacttc tgagcttggt aacttctaata tatactttaa taaatatatt ttattac 717
```

<210> 189

<211> 288

<212> DNA

<213> Homo sapiens

<400> 189

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caaaaagcat tgatgaaaaa gcaaaagggt atgtatgtat atgagaaaat taattgtacg 120
atatcattcc agtacgtttt gttgtacatt ttagtcttgt ttactttctc ttcatgttta 180
agaggatgag aactgtacag tttccagcta gttaccata ttagagaaga aataagagag 240
tattagaaga aaacaggaga gaaagaacat ttgtgaattg cagttgtc 288
```

<210> 190

<211> 1001

<212> DNA

<213> Homo sapiens

<400> 190

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gagagatatg tcaagtcttg tttacagaaa aagcaaagga aaccgttctc aagcggggaag 60
aaacaggcag ccaagtgcga agaggagcta gtcaggaaa agaagaagga gctggaaaaag 120
cgtctgcagg atgtcagcgg gcagctgagc agcagcaaga agcccggccc gaaagagaag 180
cccggctcag caccctcagg gggcccgtcc aggtcagca gcagcagctc ctccgagctc 240
gggagcagca gctccagcgg gtccagctct gacagcagt actcagaatg aactggcttc 300
ggacagaaca ggacagatgg atgtcgaca cgccgagact ctgccgtacc cctctgtggt 360
```

```

tcatattact acttctgttc catggtgtgc aggtctgcct cctaattcag tgttatgata 420
tcttccagtt tttgctttca taggtcagag atctatcttg tgtgtggcgt tagacttgat 480
gagaagggtgt gaactctgca gaaagtctct tcttcatcac tgaattcagt cacttgagaga 540
tgacaacttc aaatgctaac ccgatgaccc cagaaaaacag tgtgagattc gtaccgaaga 600
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gttctccgct cgtggtgatg tcaggagctc ctcggagggg acagagcggc tgtgtatgca 960
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```

<210> 191

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 191

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ttttgtgaaa aacaggggaca gacagccagg tacagagact cacacctgta ctcccaacta 180
ctcagcaggc tggggcagga ggattgcttg agcccaggag tctgaggcta cagttagcta 240
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aaaagaaaaa tagggatagg ttttccttcc tagcccagta gagtttgacc tcattagtat 360
ggtgcttttg gtgaggacct ctcccttgat tatccactt tctagtgaac agctaaaatt 420
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tgaaatgaaa tcttgaaaaa cagaattttt ttaaacacag acctcacacc aatattaatt 1560
ttttctctac ataattttaa actacataaa ttaagtactt aaaatttata ttgaaggcca 1620
ccaagaactt aggttgaatc ttag 1644

```

<210> 192

<211> 2231

<212> DNA

<213> Homo sapiens

<400> 192

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ttctaaacat gcactgtctt attttattcc cactataaca ctgcgaaata agcactgacc 60
ctacttgacg ttcgagaaaag ctgtggttca aagaagtga tccacctatc caggggtaca 120
gaaggtagta aggagcagag ctgagatttt aaacctgcat tcttttagagt agcccgttg 180
tctccaggag gaagagcagc aaagcccaga aaatgcagct ccacgtttgc ctggttggtc 240
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ggaggatctg taactttccc aggccatgtt gctagcaggt ggcagagccc atctgactcc 420
ttcacaccct ggatcacccc tgccctccctc tctgggcttg tgtctcaatc ctccctccctc 480

```

```

agggagcagg agcaggatct gtggccaggg agcacatggc ggatctgtcc caagccagac 540
cgccgacctc aatttgccctt ttagagccctt accccattcc agagataggg cgtctccgag 600
aggacacatt ggaggacatc tggggctctcg aaatggccgt ggttctgtcc tgggcactcg 660
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ggaagccaag gcggggagat cacttgagct caggaccagc ctgagtaacg tgacaaaact 2220
ccatctctac c 2231

```

<210> 193

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 193

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caggaagaaa aggaagttct ctgtaacagt agcagcagag ccagcccaaa ataacttcaa 180
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cggcacacag gaaagtgtac cccgaagaag ctttgacat cctctccttg accagatata 480
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gaatgaagag ccaggaaaag cctcgagtgc tgtgattgga aatgagctag ccaaaggcag 660
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atggaaaatg ttcac 1155

```

<210> 194

<211> 1528

<212> DNA

<213> Homo sapiens

<400> 194

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taccagcaat gaaagtctca cagataagaa tcctgtgtca gaaagtatct tcatgcttgc 120
agggcctgat ttgaaggaag atctccagaa acttaagggtg tggcgaacag gtgaagcaaa 180
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agagattcat ggggaaacca ttgaaaaagt agtatttgcgt gtctctgac ttgaagaggg 480
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<210> 195

<211> 624

<212> DNA

<213> Homo sapiens

<400> 195

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aatgtgttca atggatgaat ttcg 624

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<210> 196

<211> 417

<212> DNA

<213> Homo sapiens

<400> 196

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<210> 197
 <211> 328
 <212> DNA
 <213> Homo sapiens

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<210> 198
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 198
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<210> 199
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 199
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 <212> DNA
 <213> Homo sapiens

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<210> 201

<211> 1169

<212> DNA

<213> Homo sapiens

<400> 201

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<210> 202

<211> 1975

<212> DNA

<213> Homo sapiens

<400> 202

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<210> 203

<211> 440

<212> DNA

<213> Homo sapiens

<400> 203

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caggaagtga ggagtttatt aaaattcctt tgaagcattt caattcagta agaggaacta 420
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<210> 204

<211> 981

<212> DNA

<213> Homo sapiens

<400> 204

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<210> 205
 <211> 1615
 <212> DNA
 <213> Homo sapiens

<400> 205
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<210> 206
 <211> 648
 <212> DNA
 <213> Homo sapiens

<400> 206
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<210> 207
 <211> 610
 <212> DNA
 <213> Homo sapiens

<400> 207

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<210> 208

<211> 2454

<212> DNA

<213> Homo sapiens

<400> 208

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<210> 209

<211> 1967

<212> DNA

<213> Homo sapiens

<400> 209

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<210> 210

<211> 1682

<212> DNA

<213> Homo sapiens

<400> 210

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<210> 211

<211> 1096

<212> DNA

<213> Homo sapiens

<400> 211

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<210> 212

<211> 880

<212> DNA

<213> Homo sapiens

<400> 212

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 <212> DNA
 <213> Homo sapiens

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<210> 214
 <211> 1504
 <212> DNA
 <213> Homo sapiens

<400> 214
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<210> 215

<211> 623

<212> DNA

<213> Homo sapiens

<400> 215

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<210> 216

<211> 676

<212> DNA

<213> Homo sapiens

<400> 216

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<210> 217

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 217

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<210> 218

<211> 966

<212> DNA

<213> Homo sapiens

<400> 218

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<210> 219

<211> 2206

<212> DNA

<213> Homo sapiens

<400> 219

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<210> 220

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 220

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```

<210> 221

<211> 982

<212> DNA

<213> Homo sapiens

<400> 221

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<210> 222

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 222

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<210> 223

<211> 1627

<212> DNA

<213> Homo sapiens

<400> 223

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<210> 224

<211> 1868

<212> DNA

<213> Homo sapiens

<400> 224

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<210> 225

<211> 2980

<212> DNA

<213> Homo sapiens

<400> 225

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 227

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<211> 2643

<212> DNA

<213> Homo sapiens

<400> 228

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<211> 2527

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 231

<211> 1911

<212> DNA

<213> Homo sapiens

<400> 231

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<210> 232

<211> 2048

<212> DNA

<213> Homo sapiens

<400> 232

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<210> 233

<211> 2021

<212> DNA

<213> Homo sapiens

<400> 233

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<210> 234

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 234

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<210> 235

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 235

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<210> 236

<211> 2202

<212> DNA

<213> Homo sapiens

<400> 236

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ttgatggggg cagcaaacca ccatggcaca tgtgtacctg tgtaacanac ctgcacattc 2160
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<210> 237

<211> 1657

<212> DNA

<213> Homo sapiens

<400> 237

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<210> 238

<211> 979

<212> DNA

<213> Homo sapiens

<400> 238

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atatgttttg ggcgatagga gacagaaata gtgattatca ggcgttgagc cttttttag 180
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gccataaata tcagaaccaa agatcaagac attcatgtac agtctggaat gtatatatgg 480
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tgtgcagttt gaagatagtc catatttcct atttcagtat taggtcctgc aacacttttc 720
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<210> 239

<211> 2193

<212> DNA

<213> Homo sapiens

<400> 239

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<210> 240

<211> 420

<212> DNA

<213> Homo sapiens

<400> 240

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<210> 241
 <211> 1565
 <212> DNA
 <213> Homo sapiens

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<400> 241
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<210> 242
 <211> 1995
 <212> DNA
 <213> Homo sapiens

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<400> 242
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<210> 243

<211> 2212

<212> DNA

<213> Homo sapiens

<400> 243

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<210> 244
<211> 2521
<212> DNA
<213> Homo sapiens

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<400> 244
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<212> DNA

<213> Homo sapiens

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<211> 2254

<212> DNA

<213> Homo sapiens

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<211> 2730

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1595

<212> DNA

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<210> 251

<211> 3548

<212> DNA

<213> Homo sapiens

<400> 251

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<210> 252

<211> 1850

<212> DNA

<213> Homo sapiens

<400> 252

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<210> 253

<211> 1767

<212> DNA

<213> Homo sapiens

<400> 253

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<210> 254

<211> 286

<212> DNA

<213> Homo sapiens

<400> 254

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<210> 255

<211> 1896

<212> DNA

<213> Homo sapiens

<400> 255

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<210> 256

<211> 1896

<212> DNA

<213> Homo sapiens

<400> 256

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<210> 257

<211> 1590

<212> DNA

<213> Homo sapiens

<400> 257

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<210> 258

<211> 2825

<212> DNA

<213> Homo sapiens

<400> 258

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<210> 259

<211> 2296

<212> DNA

<213> Homo sapiens

<400> 259

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<210> 260

<211> 1801

<212> DNA

<213> Homo sapiens

<400> 260

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<210> 261

<211> 1575

<212> DNA

<213> Homo sapiens

<400> 261

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<210> 262

<211> 1841

<212> DNA

<213> Homo sapiens

<400> 262

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<210> 263

<211> 1907

<212> DNA

<213> Homo sapiens

<400> 263

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<210> 264

<211> 697

<212> DNA

<213> Homo sapiens

<400> 264

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<210> 265

<211> 1960

<212> DNA

<213> Homo sapiens

<400> 265

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<210> 266

<211> 977

<212> DNA

<213> Homo sapiens

<400> 266

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<210> 267

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 267

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<211> 2513

<212> DNA

<213> Homo sapiens

<400> 268

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<210> 269

<211> 1693

<212> DNA

<213> Homo sapiens

<400> 269

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<210> 270

<211> 2149

<212> DNA

<213> Homo sapiens

<400> 270

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<210> 271

<211> 1812

<212> DNA

<213> Homo sapiens

<400> 271

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<211> 1831

<212> DNA

<213> Homo sapiens

<400> 272

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<210> 273

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 273

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<210> 274

<211> 2085

<212> DNA

<213> Homo sapiens

<400> 274

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<211> 2507

<212> DNA

<213> Homo sapiens

<400> 275

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<210> 276

<211> 2824

<212> DNA

<213> Homo sapiens

<400> 276

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<210> 277

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 277

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<210> 278

<211> 2470

<212> DNA

<213> Homo sapiens

<400> 278

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<210> 279

<211> 2057

<212> DNA

<213> Homo sapiens

<400> 279

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<210> 280

<211> 2451

<212> DNA

<213> Homo sapiens

<400> 280

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<210> 281

<211> 1874

<212> DNA

<213> Homo sapiens

<400> 281

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<210> 282

<211> 1050

<212> DNA

<213> Homo sapiens

<400> 282

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<210> 283

<211> 3384

<212> DNA

<213> Homo sapiens

<400> 283

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<212> DNA

<213> Homo sapiens

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<211> 1861

<212> DNA

<213> Homo sapiens

<400> 285

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<212> DNA

<213> Homo sapiens

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<211> 2241

<212> DNA

<213> Homo sapiens

<400> 290

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<211> 1827

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 292

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<211> 2236

<212> DNA

<213> Homo sapiens

<400> 295

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<210> 296

<211> 748

<212> DNA

<213> Homo sapiens

<400> 296

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<211> 3211

<212> DNA

<213> Homo sapiens

<400> 297

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 259

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 302

<211> 2023

<212> DNA

<213> Homo sapiens

<400> 302

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<213> Homo sapiens

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<212> DNA

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<210> 306

<211> 1315

<212> DNA

<213> Homo sapiens

<400> 306

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<210> 307

<211> 950

<212> DNA

<213> Homo sapiens

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<210> 308

<211> 1947

<212> DNA

<213> Homo sapiens

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1947

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<210> 309

<211> 2322

<212> DNA

<213> Homo sapiens

<400> 309

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2322

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<211> 1898

<212> DNA

<213> Homo sapiens

<400> 310

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<210> 311

<211> 1808

<212> DNA

<213> Homo sapiens

<400> 311

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<211> 2589

<212> DNA

<213> Homo sapiens

<400> 312

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<211> 1757

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 320

<211> 2266

<212> DNA

<213> Homo sapiens

<400> 320

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<210> 321

<211> 1640

<212> DNA

<213> Homo sapiens

<400> 321

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<210> 322

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<400> 322

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 <211> 1914
 <212> DNA
 <213> Homo sapiens

<400> 323

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<212> DNA

<213> Homo sapiens

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<211> 2029

<212> DNA

<213> Homo sapiens

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<211> 403

<212> DNA

<213> Homo sapiens

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<210> 327

<211> 1863

<212> DNA

<213> Homo sapiens

<400> 327

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<210> 328

<211> 1855

<212> DNA

<213> Homo sapiens

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<210> 329

<211> 2095

<212> DNA

<213> Homo sapiens

<400> 329

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<211> 2380

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<211> 1266

<212> DNA

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<211> 1473

<212> DNA

<213> Homo sapiens

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<211> 2076

<212> DNA

<213> Homo sapiens

<400> 333

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<212> DNA

<213> Homo sapiens

<400> 334

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<212> DNA

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<400> 335

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<212> DNA

<213> Homo sapiens

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<211> 3090

<212> DNA

<213> Homo sapiens

<400> 337

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<211> 2594

<212> DNA

<213> Homo sapiens

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2594

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 342

<211> 1753

<212> DNA

<213> Homo sapiens

<400> 342

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<210> 343

<211> 2053

<212> DNA

<213> Homo sapiens

<400> 343

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<210> 344

<211> 1917

<212> DNA

<213> Homo sapiens

<400> 344

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<210> 345

<211> 512

<212> DNA

<213> Homo sapiens

<400> 345

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<210> 346

<211> 1814

<212> DNA

<213> Homo sapiens

<400> 346

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<210> 347

<211> 1733

<212> DNA

<213> Homo sapiens

<400> 347

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<210> 348

<211> 3032

<212> DNA

<213> Homo sapiens

<400> 348

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<211> 1497

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 1088

<212> DNA

<213> Homo sapiens

<400> 356

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<210> 357

<211> 512

<212> DNA

<213> Homo sapiens

<400> 357

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<210> 358

<211> 2488

<212> DNA

<213> Homo sapiens

<400> 358

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<210> 359

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 359

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<210> 360

<211> 560

<212> DNA

<213> Homo sapiens

<400> 360

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<210> 361

<211> 2017

<212> DNA

<213> Homo sapiens

<400> 361

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2017

<210> 362

<211> 810

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 364

<211> 522

<212> DNA

<213> Homo sapiens

<400> 364

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<210> 365

<211> 2610

<212> DNA

<213> Homo sapiens

<400> 365

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<211> 744

<212> DNA

<213> Homo sapiens

<400> 366

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<210> 367

<211> 1351

<212> DNA

<213> Homo sapiens

<400> 367

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 <212> DNA
 <213> Homo sapiens

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<210> 369
 <211> 1781
 <212> DNA
 <213> Homo sapiens

<400> 369
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1781

<210> 370

<211> 404

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<213> Homo sapiens

<400> 370

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<210> 371

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 371

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<210> 372

<211> 1690

<212> DNA

<213> Homo sapiens

<400> 372

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<210> 373

<211> 297

<212> DNA

<213> Homo sapiens

<400> 373

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<210> 374

<211> 1150

<212> DNA

<213> Homo sapiens

<400> 374

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<210> 375

<211> 623

<212> DNA

<213> Homo sapiens

<400> 375

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gaaataaagt agaagaaaag gcc                                     623

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<210> 376

<211> 1108

<212> DNA

<213> Homo sapiens

<400> 376

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```

<210> 377

<211> 574

<212> DNA

<213> Homo sapiens

<400> 377

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```

<210> 378

<211> 2235

<212> DNA

<213> Homo sapiens

<400> 378

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aagatgtttc tagac 2235

```

<210> 379

<211> 1543

<212> DNA

<213> Homo sapiens

<400> 379

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ccgtgcaagt aaactcactc aggtgttaag agattctttc ataggtgaaa actctcgtac 180
ctgcatgatt gccacaatct ctccaggaat ggcatcctgt gaaaatactc ttaataacatt 240
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tccaataatg caccatccac caaaccagat tgatgactta gagacacagt ggggtgtggg 360
gagttccctc cagagagatg atctaaaact tctttgtgaa caaaatgaag aagaagtctc 420
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ccgtgcagct ctacaagagg aggaacaac cagcaagcaa atcaaccga agagaccccg 720
tggcccttta aaccggcatt tgctgctaaa ggataccag aaccctcact actgtnacat 780

```

```

acaacggttc agctgtaagg gccatttgaa agtttggaat ttttaagtgtc tgtggaaaaat 840
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atttttaaacc catataacat gtgattataa tttttcttag cattttnttt gtaaagaact 1500
acaatataaa ctagttagtg tataataaaa agtaatgaaa ttc 1543

```

<210> 380

<211> 1087

<212> DNA

<213> Homo sapiens

<400> 380

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ctgcgaccta gatgtattct tggagtcacc cagaaaacca tctggacgca gggaccgagc 60
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atagtgggtg tttttggaat cagcattaca ggtggcttgt tttacacgat tttcaaagaa 240
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tcttatccta gaagaactat tatcattgaa gataatcgat cccaagatga ttaaaataat 600
caagcaagca ggtttctgat ggatgttgaa tggcgtggac tgcgtactcc gttcttcaca 660
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aatagatttt agtattgtat tcattttata ttatagaact gcataatgtc tgcagaataa 960
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<210> 381

<211> 2349

<212> DNA

<213> Homo sapiens

<400> 381

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gcagcaagaa gctgacgggt cgccctcatgc tggctgtggg aggagcagtg cttggctccc 60
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acaaccagac atgggtccac cgctatgggg agagcatcct gccaccacg ctcaccacgc 180
tctggtccct ctcaagtggc atcttttctg ttgggggcat gattggctcc ttctctgtgg 240
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tgggcccgtt catcatcggt gtgtactgtg gctgaccac aggcctcgtg cccatgtatg 420
tgggtgaagt gtcaccaca gcccttcgtg ggccctggg caccctgcac cagctgggca 480
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ccaagagtgt gctaaagaag ctgcgcggga cagctgacgt gacctatgac ctgcaggaga 720
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```

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agccaacttg taaatacacc acctcactcc tgttacttac ctaaacagat ataaatggct 2340
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```

<210> 382

<211> 342

<212> DNA

<213> Homo sapiens

<400> 382

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cggacgcgtg ggtgcaaaac aaaaaatttt aaaagaaaat gtgacttcaa aggaaaagaa 60
caaattttcca aagacttggg ggagtgaagg cagagcctgg tgcagatgga cgagggtctgc 120
agacggaggg cagaggtggg ggaagggggc aggggcctgc aggcctcccc ctggaactgg 180
gactggtctc ggtctgctga cgtcagggtc agctcccccg cggagctgac ttcagcagcc 240
cacagctgtg gggcttcagc agccacacca gccagcccca gccagctctc cgatacgttt 300
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```

<210> 383

<211> 295

<212> DNA

<213> Homo sapiens

<400> 383

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atgagaagat cttgctcctt cagactctga cctgagtggg gacctttcca ccagacacag 60
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tggtcattgt tgctgttaca aagaagaaaa ccatctgagt tctaaactct tggttgctta 180
aaagtagttc ccaagagtct gagaagctat ttctattttt aagagtcatt ttttgtaatt 240
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```

<210> 384

<211> 549

<212> DNA

<213> Homo sapiens

<400> 384

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tttcttaatg cgaaatgcga gtcggctttc ctttccaaga ggaatcctcg gcagataaac 180
tggactgtcc tctacagaag gaagcacaaa aaggacagct cgggaagaaat tcgaaaagca 240

```

```

aagagaaccc gccgagcagt caaatatcat agggccatta ctggtgcatc tgttgctgat 300
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549

```

<210> 385

<211> 1881

<212> DNA

<213> Homo sapiens

<400> 385

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tgactgcaaa ggtacatcaa gagagtgtac acatgattga agtcacaagt aatttgatta 180
atgaaactct agcaaatac cctgagtggg caaattgggt tcttgaggct caggtagtcc 240
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aataaatcat aagtataagg g
1881

```

<210> 386

<211> 435

<212> DNA

<213> Homo sapiens

<400> 386

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cctctctggg atgagagctc taaagcagag taagattacg ttctgatgta agctttaacc 180
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tcattgctta ctgtaaagag tccaggtaac tgactttatt cagttacttc ctgttcaata 420
aatttaactt ttccc
435

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<210> 387
 <211> 945
 <212> DNA
 <213> Homo sapiens

<400> 387
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 <213> Homo sapiens

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<210> 389
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 <213> Homo sapiens

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<210> 390

<211> 1974

<212> DNA

<213> Homo sapiens

<400> 390

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<210> 391

<211> 2167

<212> DNA

<213> Homo sapiens

<400> 391

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<211> 475

<212> DNA

<213> Homo sapiens

<400> 392

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<210> 393

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 393

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<210> 394

<211> 489

<212> DNA

<213> Homo sapiens

<400> 394

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<210> 395

<211> 380

<212> DNA

<213> Homo sapiens

<400> 395

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<210> 396

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 396

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<210> 397

<211> 1874

<212> DNA

<213> Homo sapiens

<400> 397

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<210> 398

<211> 1186

<212> DNA

<213> Homo sapiens

<400> 398

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<211> 2749

<212> DNA

<213> Homo sapiens

<400> 399

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<211> 1167

<212> DNA

<213> Homo sapiens

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<210> 401

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 401

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<210> 402

<211> 1518

<212> DNA

<213> Homo sapiens

<400> 402

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<211> 869
 <212> DNA
 <213> Homo sapiens

<400> 403
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 <211> 1148
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<210> 406

<211> 878

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2368

<212> DNA

<213> Homo sapiens

<400> 409

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<211> 2373

<212> DNA

<213> Homo sapiens

<400> 410

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<211> 2334

<212> DNA

<213> Homo sapiens

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<211> 3100

<212> DNA

<213> Homo sapiens

<400> 412

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 <212> DNA
 <213> Homo sapiens

<400> 419
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 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 420
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<210> 421
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 421
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<210> 422
 <211> 1109
 <212> DNA
 <213> Homo sapiens

<400> 422
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<210> 423
 <211> 1468
 <212> DNA
 <213> Homo sapiens

<400> 423
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<210> 424

<211> 677

<212> DNA

<213> Homo sapiens

<400> 424

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<210> 425

<211> 1654

<212> DNA

<213> Homo sapiens

<400> 425

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1654

<210> 426

<211> 1657

<212> DNA

<213> Homo sapiens

<400> 426

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<210> 427

<211> 562

<212> DNA

<213> Homo sapiens

<400> 427

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<210> 428

<211> 466

<212> DNA

<213> Homo sapiens

<400> 428

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<210> 429

<211> 859

<212> DNA

<213> Homo sapiens

<400> 429

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<210> 430

<211> 534

<212> DNA

<213> Homo sapiens

<400> 430

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<210> 431

<211> 1038

<212> DNA

<213> Homo sapiens

<400> 431

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cacaaataga acttttatcta acaaatcact ttcaaaaata acaggccaac tgtattttaat 60
ttgtttatgt cacttataac ttacctatct ctgtatcagg .aggaatgtt ttctgcttta 120
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agattccttt agcctttctg tcatggaaac aagatggcca ttgcagttca agccaatgtg 300
tctgtattca agacaaaaag aaggggaagc agggccttcc acatctgac cttttctcat 360
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gtacaacatg atcacccctt gttcccagga aagtgggaaa atgaagctgt acgcctttcc 480
agtctcacta atggaagggt ggaaaggaaa atggggattg ggaattacca tggatcagac 540

```

```

aaccaacagt tttgccacca gttataatta gagcagaggt cattttatat ttgaatcttt 600
tctgtaatgt cttcataaag ctcactttat tattattttt gtttggtttt gagacgagtc 660
tcgctcggtt gccagggtg gagtgagtg acgcaatctc ggctcacgca acctccacct 720
cccagggtca agtgattctc ccacctcagc ctcctgagca gctgggacta cagacatgca 780
ccaccgcacc cagctaattt ttttgtgtt ttagtagaga ccgggtttca ccatgttggt 840
caggctggtt tcaaaactct gacttcaa atccgccc cctttgcctc ccaaagtgtt 900
gggattacaa gcatgagcca ctgtgcctgg cacataaagc tcactataaa actgcagtc 960
taagtactta aaaatttctt cattgttgga tatctagttt tgttttcagt gctaacctaa 1020
tataaaaaaa tactacac 1038

```

<210> 432

<211> 717

<212> DNA

<213> Homo sapiens

<400> 432

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gacttggttt cttagctaga aaccagaaga ctacgggagg gaatataagg cagagaacta 60
tgagtcttat tttattactg tttttcacta cctactccca caatggacaa tcaattgagg 120
caacctacaa gaaaacattt acaaccagat gggtacaaat aaagtagaag ggaagatcag 180
aaaacctaa aaatgatcat agctcctggt tactgtggac ttgatagatt tgaggtagct 240
agttcagaac tccctagtca ccatctccaa gcctgtcaac atcactgcat attggaggag 300
atgactgtgg taggacccaa ggaagagatg tgtgcctgaa tagtcgtcac catatctcca 360
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ccttggcacc tagaggaatt agccattctc ttccttattg caaaagattg aggaatgcaa 480
caatattaag aagaggaagt cccagatgg gtagagagca gtcatatctt acccctagat 540
gttcatccca gcagaagaaa gaagaagggt ttggggtagg attcttcaga ggtagcctg 600
gtactttctc atcagacact agcttgaagt aagaggagaa ttatgctttt ctttgccttt 660
tctacaaaacc cttaaaaatc acttgtttta aaaagaaagt aaaagccctt ttcattc 717

```

<210> 433

<211> 1231

<212> DNA

<213> Homo sapiens

<400> 433

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cttttactat ctgcccagg ctgtcctggc ttgcatcaac atctccagca tgcgccaggt 60
gttctgccag atgcaggaa ttcacaact atggcacatc agccgagtgg actttgtgag 120
aaatgccatt acccccagat tgccccctct catcttggtt gcatccccag cctctgccct 180
gaaccaaaacc taattgtcct ggtcttaagt tctgcaaccc acccactccc ccagcaaaaca 240
taactcctag tatgctttac tcacaggcaa gggaaaggat ggggtttgaa cccctttggc 300
ctgaatatat gtaacttccc aactggtgag ggtcattaca tttggtgtgt gtccattga 360
atcaaccctg ttgtttcctt ctgtcatgct ttcacttct tcttgatca tctctccca 420
tcaacttgct tgtagtcac tgccctggat ctctttaccc agcagtgtg gcctggcttt 480
tcttttgggc aatccacccc tatccctatc ctgcaggctg tgtggatggt cacctgggtg 540
gcagtgtgta cctgagtgt ggatttgggc ctggctgtgg gtgtggtctt ctccatgatg 600
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caacaccact gtactttggg acccgtgggc agtttcgctg caacctggag tggcacctgg 720
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gtaactaata aaatgaagct gagagctttg g 1231

```

<210> 434

<211> 398

<212> DNA

<213> Homo sapiens

<400> 434

```

ggctactctg cctccatcag cattttcaaa tttcaggctc tggcctttca ccgaatgcac 60
ttcccaccag tctgttttac actgccagggt tccgctagga gctttccac ctctgcagggt 120
gcaggcctcg ctgcttctta aggcctttct ctgggggtggg aggaaacgga aactgtatga 180
ttgtctttca tattcacttt tatagaccta taatgtctac aatgtctgag agtggcggtt 240
gcggcgatgac ttttaaaaaa atgtcctgct ggtattggac cttttctgtg tttgtgaaat 300
tgctattttg tattaacaca gtatttgata aacatttata ttaagaagaa taatccctct 360
gctgaatatt attgtttcca atggagtaga aagaactt 398

```

<210> 435

<211> 551

<212> DNA

<213> Homo sapiens

<400> 435

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ctcttctccc ggtcccatct tctgagaggg cttctcagcc tggaaactat ggaaacagca 60
tcaaagagaa aggaatgtgg ggggtttccg ctgcccccca cccccagcgg cccaccccat 120
gcctcagctt catgtctgtc ccattcctat accatcccca cctgttgta tgtattatag 180
gatttgtatt ttctcctttt ttttccccct tccattcctt ctccccctct ngcattcaag 240
attatgaaac tttgctatgg gccctgcact tcctttgctt cctcctgttc accctgggtg 300
tgtacggatg aggcggagag gtgggacccc caaatatata tcagcccaac agccctaagt 360
ctccttcttt tattattagg aaaacaacaa caacaacaaa caaaaaaatg gcgtcatgaa 420
tatgaacagc attgtcagat gaattagttg aagtggtttt tttttgttt tttttttttt 480
tttttgtact gtgtcctcaa atttaatgga ttaatgtgtc ttgtatatat aaaaagaaaa 540
cctctacctt c 551

```

<210> 436

<211> 664

<212> DNA

<213> Homo sapiens

<400> 436

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ttcccagctt cctgggaagc agaggcagga ggatcacttg aggccagtag tttgaggcta 120
cantgagctg tgatccaaca actgcactcc acccgggggg gacagagtga aacctgtct 180
caaaaaagaa aaagtatgtt gatgttgatg ttggtaagga ggatcatgaa cgtttcatgt 240
gtaatgggtg tcctccacta ttcacctggc gggacgtggc tctgaagcag caggcacaag 300
gagaatgggt gcctatgagt ggcaaagaaa agaggggcaa tcccgactcc taagtaacgg 360
tcaagacatc tagctcaagc cgggcgcagt ggctcatgcc tgtaatccca aaactttggg 420
agggccgagg cgggcggatc acttgagttc naggagtgtg aagtcagcct ggccaacatg 480
gcaaaacccc catctctact aaaaatacaa acattagccg ggcgtggtgg tgggcacct 540
gcaatcccgag ctactcagga ggcggaggca ggagaatcgc ttgaaccgg gaggcgann 600
ctgcagttag ctgagatcac annactgca ctccagctgg ggcggcagag tgagactgtc 664
tcag

```

<210> 437

<211> 925

<212> DNA

<213> Homo sapiens

<400> 437

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cccacctctc tttcagcccc ctttatgggg accaggcagc tctggaacca gccacagggg 120
ctgttagaga agcaaggcct ggagtggcct gcaccgagta gcagggtcag ggttcgtgtg 180
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tgccagcacg gtctcctgtg cccaccagcc ccacaggtgc tgtgctttgt gctcttggct 360
gctgtgctgg gacagaatgg gatgccagga agagaagaaa gggggtgcag tctgaggcca 420
ccacccccct tctatctaa gggagggctg aagacaaggg gccggcattc agtggcagca 480
gaaaggagag gctccttgaa gctgctcagt cagaggcccc cgctccctct tttgccttcc 540

```



```

gcagactgaa gacctgaagg ggctggcttt tggagtgttg aggtgaatat ctgggagcag 600
agatcatgaa tagctcaggg cagtgaatgg cgcaccaaga gcagggtgt gtgtgggagg 660
ctgcagccag gattgcctca gctcctcccc ctcagggtgg gaggatagca caggctaggg 720
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gctgtggctt agaggatagt tggcttcctg cctctctcct ctaaaatagc aagtctggga 840
aatcctgggg tgagtggagt caccccaact cagttgtgtg gcagagactg agactaaagc 900
atcanttaat aaacccccca agccc                                     925

```

<210> 438

<211> 351

<212> DNA

<213> Homo sapiens

<400> 438

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gaagggggct gccgatcatg gtgaaagggg acattttcat tgggtcctcg tgggtccgtgt 60
cctgggtact cggggtcacc gtgcagacag ctgccctttg tctgccggac acagtgcagg 120
caggggagac aggttttaggg ctctgacatg gggcacaggg actccgagcc aagggatgtc 180
agggcagctc tgtgcactct aggcctttgc ccttgctttg cgggtcagtt catgtccaaa 240
gcacttttag aggtgcagg gatcaatacc caatataccc aacaactgga attgtttaca 300
catgacctac attttgagcg gtttatcaat aaacatgtgt gaacaactgt t          351

```

<210> 439

<211> 1265

<212> DNA

<213> Homo sapiens

<400> 439

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cgagttccta cacacacaga cacacacaca cacacacaca cacacacaca cacgggcaac 60
atggcgaaac ccagtctcta cacacatata cacacacata cagacacaca gacacacaca 120
cacactagct ggggtgtggtg gcgcacatct gtgggtcccag ctactcaaga ggctgaggtg 180
gaaggatcac ttgagcccag gaatttgagt tgcagtgaac cgagattgtg ccattgcact 240
ccagcctgag agacagagcg agactctgtc tcaaaaaaaaa aaaaaaaagt ttatgtcctt 300
aaataaaaaat tcataggctc tagattagat tagaagatac agcttagatc aaaagggctc 360
ttttggatac tttaatttac tctgtgtgcc tgccatgtgg atgagaagtg attacatgtg 420
gaaattcata gtgttatctt tttatagcat tcatttaaaa aggttggatt tatgtaggcc 480
ttttcctttt gttctttatt gcagatatct aagagaagct tatgtggtgt tagttcacca 540
tattagagaa tctattccag gtgtgagcct cagcagcgat ttcatgtctg gcttttgttg 600
tgagacggag gaagatcacg tccagacagt ctctttgtct cgggaagtct agtacaacat 660
gggcttcctc tttgcctaca gcatgagaca gaagacacgg gcatatcata ggctgaagga 720
tgatgtcccg gaagaggtaa aattaaggcg tttggaggaa ctcatcata tcttccgaga 780
agaagcaaca aaagccaatc agacctctgt gggctgtacc cagttggtgc tagtggaagg 840
gctcagtaaa cgctctgcca ctgacctgtg tggcaggaat gatggaacc ttaaggtgat 900
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agagctgact tgggcaatcc tccccaacag gaaggggaga cattgcctgc cactgaggaa 1140
acaggtcatg aaggtggaga taagctgcaa ggggcgaagc aactttatgt cagtggaaaa 1200
cgtgtctctt taaagctgct atgtgaacag cttttacagt cattaaattt acctaaacta 1260
aggtt                                     1265

```

<210> 440

<211> 556

<212> DNA

<213> Homo sapiens

<400> 440

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aaataaactg tatttgcaaa tccaacattg agcttctgga ctacgctgac tccactgctg 60
aatcctcaat ggaaagggtc gactggttgc agttgaaatg acctgaaatg tagcctctgt 120
ccttgtaagt cagttgactt gccgcacatc tctttgtgta cttgtacggg actggcagaa 180
aagtcatttt tcaaaagcca taggcttttc cttgccctta gctgtaataa tgcatctgat 240
tttgatttcc tccagagctg tgtttctgtc catcacctgt gtattggccc tgtgtttacc 300

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```

actctggccc actcctcacc cccttgcctc cctgggtcttc tggagtttgt gacattgatt 360
tgaaatggat ggtgttctct tgagagcaag tgagattgtt agaattaagt tccaactata 420
cagttttcta acatagctat aaggctcctg ttgctgtttg tgataactga tagataactc 480
attggaaacg tgcatacatt tatattcaga tgaaattatg gtttgcaactg tctattaaat 540
atctcgatta attttc 556

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<210> 441

<211> 418

<212> DNA

<213> Homo sapiens

<400> 441

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ctcttcacaa cagtatcaac actggcttct cccgggttcat tttatgcgtg cgagaagtca 60
gtggttaactg ctgcagggtt taatacatta gtggttaactg gtttaaaaaa caaagactgt 120
aagcctgtgt gtgccactgt ttgcttcaac agtatatcct actaataagc ctcacctatt 180
taatccaatg agtttttaaa cttaaactca ttcccttctt ctttccctac cttttttttc 240
tttttttctt aaaaaaatat tttgtgttat taacagaaat tcatatttgg tgtggcttaa 300
cggtatattca gaaggtcatc agattgtgag actgcttctt tgaaacattt ttgtgctatt 360
gttttaaaaa aataattaaa aaacagttgg cgtaataaaa aatgtcaatg tgaaactg 418

```

<210> 442

<211> 902

<212> DNA

<213> Homo sapiens

<400> 442

```

gattcccttc cactgtttta tgaattaatt ccagttcttt tcatgtatct ttgaacctaa 60
gattatgaag taatttcctt attagggact agaatgactt cagttttttc atttgataaa 120
aatcagaact gctacctttc ctttttttaa tgatgcaaaa tgtagatgag tgcattaagg 180
tttgtaagat ctttatcatt ttatgtcatt cattgaaaat tgaaatgttc attcttttta 240
atgttttctt atttcctttt gcctagcatt tgacttttgg gtttaagtgc tgtagtcca 300
tgacatcatt gtttgctgtt gtgttacaga gagagaagga acctcacctg ttggtcagct 360
caccacacat ccgtttctca ttacgtgtaa ataaactgtc agagctgatg ttacagcttt 420
tacagtttaa agcattcccc tctgtcttag ttctttttt cttgtttacat gttttgggca 480
ctttccctca ttcaccacct tccagggttt catagaaaat aacttggtac aaaatcagtt 540
caattctaag gtggacatag tggcatgttc ataattagac ccatataggg gacactgagc 600
tttaaactgt tgattctaaa ctctatacat taaaaaaatt cagcccaggc ccctcaaagc 660
ctgagaaaaa ttaatttgct cttaatttaa tgttccaaaa ctactcttg gaaaaatgcc 720
tggtgaaaaa ctacaggtgg gtcacatgtg ggggtgtgt ccgtgacact caggattcca 780
gtcagaacct aatcctcata tctattgcct acaaaaatag accaagaatg ttgtgtctct 840
tttataatcc tttaaatatt taacattcaa gttttctttg tcttaaattc agccttttcc 900
tt 902

```

<210> 443

<211> 553

<212> DNA

<213> Homo sapiens

<400> 443

```

tggaattgct ggagactttg cacctgggct tggccagctc ccggctcaga cctgaagctg 60
agccagagct aggtgtgaag actccagagg agggctgcct cctgaacact gcccatgtta 120
ctggccctga ggcccgctgt gctgcccttc gggagggaatt cctggccttc cgcgcgcgcc 180
gagatgtac tagggctcgg ctaccagcct atcgacagcc agtccccac cccgaacagg 240
ccactctgct gtgaacatcc ctgatgtgag gctgtgaaaa ggcataatgga cctgcaaagg 300
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gtgcccaggc acagaccctg atagtgggtt tgggtcacct tggatggaa tgtatgtgct 420
gaccccttag gtgagtcctg ggattggaac agggatctta ggtctgcctc tctctctctc 480
tctctctctc tctctgtgtg tgtgtgtgtg tgtgtgtgaa gttttttaca ggtgaataaa 540
caaagtttga aag 553

```

<210> 444

<211> 1230
 <212> DNA
 <213> Homo sapiens

<400> 444
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 aagattttttg ttttgttttg ttttgggtgc taagggggcc cagagccact tctctgtggc 120
 ccctgctcaa actcctccag agattctggc atgttgaggc tgcagctctt ttggttattg 180
 tgatcaagga tttcngggca ccttccccct cccttttgaa gacttaggac tggaccagct 240
 aagggtctgta aacaagcatt tccctccctt ggcaggaagt gcttaatgtc tttgcttttg 300
 ggaaccggtg ttctgggcag gctaggaggc cgcgcctgac ctgctgtggg ctctcttccc 360
 actgtggggg tcagaagatg gtggctgcct atgtgcatgt cacagatcct cacttccagc 420
 tgggtggatgt aggatctgag gccagagaa ggttggtgac ttggccatag tcacacagcc 480
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 tggctcaagc ctgtaatccc agcactttgg gaggccaagg cgggtggatt gcctgagctc 1020
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 attagccagg catggtggcg ggtgcctgta gtcccgggtg ctgcagaggc tgaggcagga 1140
 gaatcgcttg aacctgagag gcggannnta caatgagctg agatcatgcc gctgcattcc 1200
 agcctgagtg acagagcagag attccgtctc 1230

<210> 445
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 445
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 gtcggccgca gcagtgattc caacaagcag ctattggggg ggaaacacag catttaaaaa 120
 gatcatcatt aaaaaacaag atttatacaa caattactta ggatgtttgt gatctgccga 180
 ccttgctata gatgccatgt taccaatgat ttctgtgggt gggggcttgc cattgtttac 240
 tctcttattt accaactctt ggcctaggcn ngacagtggg caccttcccc cagccctggc 300
 ngggcccagc gcctgtgttc tgtgttagaa aggttttata tatatataaa attacatata 360
 tatgtagaaa tatatgtaat tttgggggccc ccgtctcctc gcacatttta cagtacctca 420
 tttttcccat gtatgtattt gagaaaatgc taatatatag agaaaaaat ggntctttaa 480
 gcttaaatgt gtggtttttt ccattccatg ggattcacat tggttttagt catttaacat 540
 aactagnatg ttgtattata tatatgtgta tactgattga aatttttaac agatttgtac 600
 tttttttaa atgaaagttg ctagttctgc ttgaccaagt agtgcaatca ttattttttt 660
 taatattgtt gctgatttca gagggatatt cactaataaa tgtatgatgt atacc 715

<210> 446
 <211> 1750
 <212> DNA
 <213> Homo sapiens

<400> 446
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 ttattgcagg ttttcccttg gaatatggat aaatacacca tgatacgga actagaagga 180
 catcaccatg atgtggtagc ttgtgacttt tctcctgatg gagcattact ggctactgca 240
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 gggcacctgt tccccctac tccaatatat gctggaggag caaatgaccg gtgggtacga 360
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 aggttcttga gaattgatga ggattatcca gtgcaagttg cacctttgag caatggctct 480
 tgctgtgcct tctctactga tggcagtggt ttagctgctg ggacacatga cggaagtgtg 540

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cgaagagtga	tgcccaccca	agaagttcag	gagctgccga	ttccttccaa	gcttttggag	660
tttctctcgt	atcgtattta	gaagattctg	ccttccctag	tagtagggac	tgacagaata	720
cacttaacac	aaacctcaag	ctttactgac	ttcaattatc	tgttttttaa	gacgtagaag	780
atztatttaa	tttgatatgt	tcttgactg	cattttgatc	agttgagctt	ttaaaatatt	840
atztatagac	aatagaagta	tttctgaaca	tatcaaatat	aaatTTTTTT	aaagatctaa	900
ctgtgaaaac	atacatacct	gtacatat	agatataagc	tgctatatgt	tgaatggacc	960
cttttgcttt	tctgattttt	agttctgaca	tgtatatatt	gcttcagtag	agccacaata	1020
tgtatctttg	ctgtaaaagt	caaggaaatt	ttaaattctg	ggacactgag	ttagatggta	1080
aatactgact	tacgaaagt	gaattgggtg	aggcgggcaa	atcacctgag	gtcagcagtt	1140
tgagactagc	ctggcaaaca	tgatgaaacc	ctgtctctac	taaaaataca	aaaaaaaaaa	1200
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<210> 447

<211> 1031

<212> DNA

<213> Homo sapiens

<400> 447

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<211> 2166

<212> DNA

<213> Homo sapiens

<400> 448

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<210> 449

<211> 1107

<212> DNA

<213> Homo sapiens

<400> 449

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<210> 450

<211> 2010

<212> DNA

<213> Homo sapiens

<400> 450

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<210> 451

<211> 817

<212> DNA

<213> Homo sapiens

<400> 451

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<210> 452

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 452

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<210> 453

<211> 836

<212> DNA

<213> Homo sapiens

<400> 453

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<210> 454

<211> 1354

<212> DNA

<213> Homo sapiens

<400> 454

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<210> 455

<211> 1820

<212> DNA

<213> Homo sapiens

<400> 455

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<210> 456

<211> 1782

<212> DNA

<213> Homo sapiens

<400> 456

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<210> 457

<211> 2607

<212> DNA

<213> Homo sapiens

<400> 457

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agccgatattt	cctctcagtc	gggtactcca	cctgccactg	gtgccacatg	atggaagagg	420
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<210> 458

<211> 645

<212> DNA

<213> Homo sapiens

<400> 458

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<210> 459

<211> 659

<212> DNA

<213> Homo sapiens

<400> 459

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<210> 460

<211> 1282

<212> DNA

<213> Homo sapiens

<400> 460

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<210> 461

<211> 663

<212> DNA

<213> Homo sapiens

<400> 461

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<210> 462

<211> 709

<212> DNA

<213> Homo sapiens

<400> 462

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ttgtcaagaa ataccctgag ccagtctctg agacgcttcg gtaaaaaaat tccctggatg 660
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<210> 463

<211> 309

<212> DNA

<213> Homo sapiens

<400> 463

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taaacagtc 309

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<210> 464

<211> 324

<212> DNA

<213> Homo sapiens

<400> 464

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ctcaagtcca tgaacagata ttgttgcat ttccacaatg ctgattaaac ataataaaca 300
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<210> 465

<211> 2140

<212> DNA

<213> Homo sapiens

<400> 465

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<210> 466

<211> 2510

<212> DNA

<213> Homo sapiens

<400> 466

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<211> 1160

<212> DNA

<213> Homo sapiens

<400> 467

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<210> 468

<211> 1866

<212> DNA

<213> Homo sapiens

<400> 468

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<210> 469

<211> 1825

<212> DNA

<213> Homo sapiens

<400> 469

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<210> 470

<211> 417

<212> DNA

<213> Homo sapiens

<400> 470

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<210> 471

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 471

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<210> 472

<211> 1266

<212> DNA

<213> Homo sapiens

<400> 472

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<210> 473

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 473

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<210> 474

<211> 755

<212> DNA

<213> Homo sapiens

<400> 474

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<211> 630

<212> DNA

<213> Homo sapiens

<400> 475

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<210> 476

<211> 1143

<212> DNA

<213> Homo sapiens

<400> 476

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<211> 2260

<212> DNA

<213> Homo sapiens

<400> 477

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<210> 478

<211> 995

<212> DNA

<213> Homo sapiens

<400> 478

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<210> 479

<211> 2803

<212> DNA

<213> Homo sapiens

<400> 479

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<210> 480

<211> 312

<212> DNA

<213> Homo sapiens

<400> 480

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<210> 481

<211> 3165

<212> DNA

<213> Homo sapiens

<400> 481

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<210> 482

<211> 620

<212> DNA

<213> Homo sapiens

<400> 482

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<210> 483

<211> 2162

<212> DNA

<213> Homo sapiens

<400> 483

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<210> 484

<211> 1737

<212> DNA

<213> Homo sapiens

<400> 484

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<210> 485

<211> 1972

<212> DNA

<213> Homo sapiens

<400> 485

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<210> 486

<211> 2015

<212> DNA

<213> Homo sapiens

<400> 486

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<211> 619

<212> DNA

<213> Homo sapiens

<400> 487

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<210> 488

<211> 1179

<212> DNA

<213> Homo sapiens

<400> 488

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<211> 2456

<212> DNA

<213> Homo sapiens

<400> 489

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<211> 2458

<212> DNA

<213> Homo sapiens

<400> 490

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<210> 491

<211> 2259

<212> DNA

<213> Homo sapiens

<400> 491

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<211> 1168

<212> DNA

<213> Homo sapiens

<400> 492

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<210> 493

<211> 1048

<212> DNA

<213> Homo sapiens

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<210> 494

<211> 2353

<212> DNA

<213> Homo sapiens

<400> 494

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<211> 2557

<212> DNA

<213> Homo sapiens

<400> 495

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<211> 2496

<212> DNA

<213> Homo sapiens

<400> 496

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<210> 497
<211> 2053
<212> DNA
<213> Homo sapiens

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<400> 497
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<210> 498
<211> 2610
<212> DNA
<213> Homo sapiens

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<400> 498
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<210> 499

<211> 1212

<212> DNA

<213> Homo sapiens

<400> 499

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<210> 500

<211> 1743

<212> DNA

<213> Homo sapiens

<400> 500

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<210> 501

<211> 1971

<212> DNA

<213> Homo sapiens

<400> 501

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<210> 502

<211> 562

<212> DNA

<213> Homo sapiens

<400> 502

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<210> 503

<211> 977

<212> DNA

<213> Homo sapiens

<400> 503

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<210> 504

<211> 797

<212> DNA

<213> Homo sapiens

<400> 504

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<210> 505

<211> 738

<212> DNA

<213> Homo sapiens

<400> 505

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<210> 506

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 506

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<211> 2477

<212> DNA

<213> Homo sapiens

<400> 507

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<211> 1308

<212> DNA

<213> Homo sapiens

<400> 508

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<211> 1381

<212> DNA

<213> Homo sapiens

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<210> 510

<211> 1514

<212> DNA

<213> Homo sapiens

<400> 510

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<211> 1872

<212> DNA

<213> Homo sapiens

<400> 511

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<211> 1195

<212> DNA

<213> Homo sapiens

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<211> 1365

<212> DNA

<213> Homo sapiens

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<211> 2908

<212> DNA

<213> Homo sapiens

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<210> 515

<211> 1027

<212> DNA

<213> Homo sapiens

<400> 515

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<210> 516

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 516

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<210> 517

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 517

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<210> 518

<211> 1883

<212> DNA

<213> Homo sapiens

<400> 518

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<210> 519

<211> 693

<212> DNA

<213> Homo sapiens

<400> 519

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<210> 520

<211> 2024

<212> DNA

<213> Homo sapiens

<400> 520

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<210> 521

<211> 1182

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<210> 535

<211> 1295

<212> DNA

<213> Homo sapiens

<400> 535

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<210> 536

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 536

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```

<210> 537

<211> 1023

<212> DNA

<213> Homo sapiens

<400> 537

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<210> 538

<211> 1333

<212> DNA

<213> Homo sapiens

<400> 538

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```

gacgttcggt atgggtggc tgttgccgag ctatttcctt atctccatgt ttggaggagt 360
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<210> 539

<211> 1110

<212> DNA

<213> Homo sapiens

<400> 539

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```

<210> 540

<211> 144

<212> DNA

<213> Homo sapiens

<400> 540

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tagctatgta ttcaaacagc taatagttta atgttctgct ttataaactt aattttaggc 120
tgcattaata aaagtgtagt ctcc                                     144

```

<210> 541

<211> 1069

<212> DNA

<213> Homo sapiens

<400> 541

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<210> 542

<211> 1634

<212> DNA

<213> Homo sapiens

<400> 542

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<210> 543

<211> 473

<212> DNA

<213> Homo sapiens

<400> 543

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<210> 544

<211> 642

<212> DNA

<213> Homo sapiens

<400> 544

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<210> 545

<211> 912

<212> DNA

<213> Homo sapiens

<400> 545

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<210> 546

<211> 759

<212> DNA

<213> Homo sapiens

<400> 546

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ctatataagg aaggggatgg gattttccat tctaaaagtt ttggagaggg aaatccaggc 660
tattaaagtc actaaatttc tattttgtgt tgaacttgct gctttttttc atattgaaaa 720
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<210> 547

<211> 1016

<212> DNA

<213> Homo sapiens

<400> 547

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<210> 548

<211> 640

<212> DNA

<213> Homo sapiens

<400> 548

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cggacgcgtg gggatgaagg tgacttgga tctgctgtac agatggcatt aaatgaatat 60
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tttaaaaaat gatggatgag aaaagaaaga ttgggtccggg ttaatatatt cctctagtat 540
aagtgaatta ctagtcttc tttatttaga caaacacaca cacaccagat aatataaaact 600
taataaatta tctgttaatg tagattttat ttaaaaaact 640

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<210> 549

<211> 591

<212> DNA

<213> Homo sapiens

<400> 549

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tattattatc atgtgcaaag tatcagtttg aggacaggta aaatcaaaat gtgtatgctc 180
tctagaaggg aaagtcccta ctgaagatag ctttgcttaa atgagctcaa ttacaatgtg 240
aatgctgagg tttattgtgt tggctgtatg gtcattgagaa aatggctcatt tccttgacta 300

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```

cctgatacgg tttggctgtg tccccaccca agtcttattt tgaattgtaa tccccataat 360
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catgctgttc tcatgattgt gagttctcat gagatccaat ggttttatac atggtagtct 480
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<210> 550

<211> 998

<212> DNA

<213> Homo sapiens

<400> 550

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<210> 551

<211> 837

<212> DNA

<213> Homo sapiens

<400> 551

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aaggctctcc tgaaactctt acaaacttaa ggaaaggata cctgtttatg tataatcttg 240
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cagtgaataa caaagttaga ttttcccttt ttcttcagat ttatcttata atgatatatt 780
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<210> 552

<211> 1957

<212> DNA

<213> Homo sapiens

<400> 552

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ttttttcaga atgaacttaa taattacctg ttggtttgtt gtttaattatc ctccctccct 60
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agtttacgcc ccaaggtaaa attaactctg ccaggctctt gtttttcacc tgcatcagtt 180
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tcattaggtg aggtagaatg aacatggcag aaaataggat aggacaacat atctttttat 300
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<210> 553

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 553

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attgctggat catnnattgt tctgttttta attctttgaa gaccttcata ctgttttcca 180
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<210> 554

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 554

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aaatgtcttt  cttctctatct  gggctctgtt  aaagcgggtg  tcagtttgtgt  cttttcacct  180
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<210> 555

<211> 2054

<212> DNA

<213> Homo sapiens

<400> 555

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<210> 556

<211> 744

<212> DNA

<213> Homo sapiens

<400> 556

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aagaaaaaat ttttggtaaa cagtattgtg taaaattgct ttttgtatac caatatatgc 600
atgtttttgt catgagtagt acttgtgttg atactcctgt tgatgttaaa ttactatata 660
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taaaccattt gttttactgc taag 744

```

<210> 557

<211> 549

<212> DNA

<213> Homo sapiens

<400> 557

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ctttttttttt tttttttttt tttttttttt tatgagaatc atacagtggc tttattctta 60
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<210> 558

<211> 855

<212> DNA

<213> Homo sapiens

<400> 558

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<210> 559

<211> 504

<212> DNA

<213> Homo sapiens

<400> 559

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cggcttgctg tggggctgac ttctgtttgg tttgagcccc tttttgtttt gccctctggg 420
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<210> 560

<211> 1236

<212> DNA

<213> Homo sapiens

<400> 560

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gcgtgagaaa ggggaggaga gtggttgctg ccctcagccg gcttgaggac agagctgttc 180
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<210> 561

<211> 565

<212> DNA

<213> Homo sapiens

<400> 561

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tctgtcctca ttcctgccc ttcttttggg tgccatatgg aatggccatg gaatgcacga 60
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aacatgtttc cgtgactcat ctatgcagag caattatggg aaacagcttt ggtcaacatt 180
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cagcccttcc tacaagcacc tatcattggg cttgtcacac tctattgctc ttctgtccc 360
aagatgcagt cttctctcca atgatactac caagtattag ttttctcaa ccacactcaa 420
tctttttgct ccaccctgaa ttccctcacac ctaaccctga tagttacct aagtacact 480
taaatgtttc agagtgaatg caaaaaagag tngatgtact tggagtcgga tatacaattt 540
atccctaatt aaagcattta aaagg

```

<210> 562

<211> 581

<212> DNA

<213> Homo sapiens

<400> 562

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ccccgcgtc cggccgcaac ctgcacagcc atgcccgggc aagaactcag gacgggtgaat 60
ggctctcaga tgctcctggg gttgctgggt ctctcgtggc tgccgcatgg gggcgccctg 120
tctctggccg aggcgagccg cgcaagtttc cggggaccct cagagttgca ctccgaagac 180
tccagattcc gagagtgtcg gaaacgctac gaggacctgc taaccaggct gcgggccaac 240
cagagctggg aagattcgaa caccgacctc gtcccggccc ctgcagtccg gatactcacg 300
ccagaagtgc ggctgggatc cggcggccac ctgcacctgc gtatctctcg ggccgcccct 360
cccgaggggc tccccgaggc ctcccgcctt caccgggctc tgttcgggct gtccccgacg 420
gcgtcaaggt cgtgggacgt gacacgaccg ctgcggcgct agctcagcct tgcaagacct 480
caggcgcccg cgctgcacct gcgactgtcg ccgcccgcgt cgcagtcgga ccaactgtcg 540
gcagaatctt cgtccgcacg gccccagctg gagttgcaact t 581

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<210> 563

<211> 1007

<212> DNA

<213> Homo sapiens

<400> 563

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gaagcggatc ccgtccgagc cccggcccca agtaacgccc ccgccccgga gccgccttgg 60
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tggaccacta cagctggacg ggcaatggcg ggtcggggag gcgcagcacg acccaatgga 180
ccagctgctg ggaacaagat ctgtcaattt aagctgggtt tgctggggga gtctgcggta 240
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acaattggag cggccttcct cacacagact gtctgcctgg atgacacaac agtcaagttt 360
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ggggcccagg ctgccatcgt ggtctatgac atcaccaaca cagatacatt tgcacggggc 480
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```

<210> 564

<211> 946

<212> DNA

<213> Homo sapiens

<400> 564

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gccaacctcc tactcctcat tgtacccatt ctaatcgcaa tggcattcct aatgcttacc 60
gaacgaaaaa ttctaggcta tatacaacta cgaaaaggcc ccaacgttgt agggccctac 120
gggtactact aacctttcgc tgacgccata aaactcttca ccaaagagcc cctaaaacct 180
gccacatcta ccatcaccct ctacatcacc gcccgcacct tagctctcac catcgctctt 240
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aactcaaaact acgcccgtgat cggcgcactg cgagcagtag ccaaacaat ctcatatgaa 420
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ttcatagccg aatacacaaa cattattata ataaacaccc tcaccactar aatcttctta 720
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ctacttctaa cctccctgtt cttatgaatt cgaacagcat acccccgatt ccgctacgac 840
caactcatac acctcctatg aaaaaacttc ctaccactca ccctagcatt acttatatga 900
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<210> 565

<211> 426
 <212> DNA
 <213> Homo sapiens

<400> 565
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 tagaaacaaa caaaactttg gacaaaatc ccagttcaaa gaaacaaaaa gtggaaacta 300
 ttctatcata actaccaag gactactaaa aggaaaaatt gtgttacttt ttttaaattc 360
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 aatttt 426

<210> 566
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 566
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 aagaggagaa gaggaacac aagaagaaac gcctggtgca gagccccaat tcctacttca 120
 tggatgtgaa atgcccagga tgctataaaa tcaccacggg ctttagccat gcacaaacgg 180
 tagttttgtg tgttggctgc tccactgtcc tctgccagcc tacaggagga aaagcaaggc 240
 ttacagaagg atgttccttc aggaggaagc agcactaaaa gcactctgag tcaagatgag 300
 tgggaaacca tctcaataaa cacattttgg at 332

<210> 567
 <211> 870
 <212> DNA
 <213> Homo sapiens

<400> 567
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 gagaagagaa aaatgcagga cactggctca gtagtgccct tgcattgggt tggcctttggc 120
 tacgcagcac tggttgcttc tgggtgggatc attggctatg taaaagcagg cagcgtgccg 180
 tccctggctg cagggctgct ctttggcagt ctagccggcc tgggtgctta ccagctgtct 240
 caggatccaa ggaacgtttg ggttttccta gctacatctg gtaccttggc tggcattatg 300
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 tgttccagct tagactgatg aagaattaaa aatctgcac ttccactatt ttcaatatat 480
 taagagaaat aagtgcagca tttttgcac tgacatttta cctaaaaaaa aagacaccaa 540
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 tctttctgta tctgtaggta aatctcaagg gtaaaatgtt aggtgtcagc tttcagggct 720
 ctgaaaccct attccctgct ctgaggaaca gtgtgaaaaa aagtctttta ggagatttac 780
 aatatctgtt cttttgctca tcttagacca cagactgact ttgaaattat gttaagtga 840
 atatcaatga aaataaagt tactataaat 870

<210> 568
 <211> 586
 <212> DNA
 <213> Homo sapiens

<400> 568
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 aactagtga tctggacagg gatgttttcc attccatctg gcataacccc ttctgagcc 180
 catggacata tctgaagcct tcttctctac agttcagccc aggccctcca tgaacacatt 240
 tgcttgttca catctgtctt tgtctaactc ttatagcatt tctgtcttct gtcattttct 300
 gttggatact taacctttta ttaggctgtt ggtgtgtatt attctttaca gctagatctt 360

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aaccattg atagacatca tattttgtat ttttcacacc gatcagtttt tagctgaaag 420
ctattatata taggaggccc ttaaaatata tggttaaata ataagtattt cacaacccgt 480
ttttgaatat ttccctctct aggtttgaac ttggctcatc ttccatagcc cacatggtaa 540
tggttacaac aaatcaattc tccacaagaa cacggcttga agaggt 586

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<210> 569

<211> 822

<212> DNA

<213> Homo sapiens

<400> 569

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agctcctgca cccccaggtc ctgcagctgc ttgttaagct ttttgagact gagcactccc 60
agctggacgt gatggagcag cttgagttga agaagacact gctggacagg atggttcacc 120
tgctgagtcg aggttatgta cttcctgttg tcagttacat ccgaaagtgt ctggagaagc 180
tggaactga catttcactc attcgtctatt ttgtcactga ggtgctggac gtcattgctc 240
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ccagaacccg ttgtggaaaa accctttcaa gaagctgttt taagaggctc tggcagcgtc 480
ttgaaaatgg gcaccgctgg gaggaggtgg atgacttctt tacaaaggaa aatggttagc 540
gcttcagtga gaaactgccc ttacaaacag tcccttctct gctgtcaatc caatactgct 600
cccaaactct gttttcagtg ttcatctccc tcaaggcagg cgctgggctc ccacgacccc 660
tcaggacaga tctggccgtc agccgcgggc cgctgggaac tccactcggg gaactccttt 720
ccaagctgac ctgagttttc tcacaagaac ccagttagct gatgttttat tgtaattgtc 780
ttaatttgct aagaacaagt aataagtaaa tttttaaaaa gc 822

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<210> 570

<211> 1505

<212> DNA

<213> Homo sapiens

<400> 570

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gacaagcttg gtctgtaaga acacgtgggc aggtgtgtgg gtgtctcaga ccctcgagct 60
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gggtggaagg tccgcggggc ctgcttccct gttgctgggtg caggcggagt gtctgaaggc 180
tgacgcacac tgggcatagc agtgcgccta acgcttcttg taaaacagac atttcgcctg 240
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gctttttata tactcctgtt ttttctctcg tgagtgtgca atcgggggac agtggtgagt 360
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gcgggaatgg ctttccgggt gacatctgcc agtttggtcc ccatggcgct catccgcgg 540
gctcggaccc cagcctctct tacatcttcc ccttgtagtg gaaggggtcg cagcagccca 600
cagcttcggc ccggttcccg ggcttgggga atcttctccg tatcgtagct cttggctcct 660
ccatataaga cataggaaca tgcttgagg caaagctcct ttctaggaga gatgccctc 720
tcttacttac ataatttgc tgggaaatta tatgtgaatt gcatttttaa aagcggactc 780
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cttgaggtcn ggagttcaag accagcctgg gcaacataac aagactcatc tctgttatan 1500
aaggt 1505

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<210> 571

<211> 1010

<212> DNA

<213> Homo sapiens

<400> 571

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cagagaacaa gatgtgtctt atgagtcttc tttctcaata cctgccctgt ctcaaattctc 60
acttgacaaa tgggtctacga tcttgtagtt atccaaaaga gcctatgaaa aatggacagc 120
tgcttttgac aataatgccc ctcccaactt cccattcata gaatcataaa gcgatatgtt 180
tcagaactga gagagaaaag tttacctttt attccaaatg cctcgtagtc ggtttaagtc 240
cagactcagg tcataaatca aagacagttt tgcacgttgc tcttcaccta aatctagcag 300
tttccctgag gccctatgag ggcattggaca gaaaatgaag gatgcaacca cccaggacag 360
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<210> 572

<211> 673

<212> DNA

<213> Homo sapiens

<400> 572

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cccaggcgcc tctagacctc agcctcagcc tcagcctcag cctcagcccc gatgtcagca 60
ctgaggccctc acccccacga gcttcccagg acattccttg cttggacagc agtgcccctg 120
agagtggcac acctatgggt gccctgggag actggcctgc ccctattgag gagcgtgaga 180
gcccggcagc ccagcccctg ctggaacacc agtactgagc tacctggcgc ccactggacc 240
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tctttttttt tcttttctct tttttttttt tttttgtgct tcggagacat cagaattaat 660
aacactattt ttg 673

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<210> 573

<211> 649

<212> DNA

<213> Homo sapiens

<400> 573

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tttaatttgt gcagaatgat aaagaatggt ccttttagaa gtgtgttatg tctgtacctg 60
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gttttttaca ttggaaaaaac taattcttgg gattctttca tacattttca tcaaaacttt 180
cagtgtgatt atgtattcat atcttcagtt taatatgtca gtataataga tattgttcaa 240
aagtttcttg ttgctaaagt ggtgtaatct gttacacaga tgaatagcta gatgtggaag 300
gagatatgta aacaagaaac ctttgggtat tgtttcttaa gtaaaattgg gacaatcatg 360
gtaagcaaac ttagttctgt aactgcattt ttcaccttaa agttaaagtg aaatgcatga 420
tggatattta ttcttgaat tatgcaatgc aacattttac atgtaaatag cactgggtcat 480
atactgatgt atatggttat ctgggttata tctattttta tgtaaactct attttgtttt 540
tggcaagaag tgaatttgag acttatgtgc aggttgccat tgaattttgc tctgggtgaat 600
gctgagatcc agctttttct taaaaataaa tgggacctg ttttccaat 649

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<210> 574

<211> 840

<212> DNA

<213> Homo sapiens

<400> 574

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aatctgtagt cctacaaaac tcaggcatag aactcatttc ctttatggct ctataatgga 60
actttaccca actctcacgt tccccatgac cacagatgtg gaaaatttga atcttgacag 120
ttcaagggtga actcagtcac tttcagagtt ttcatagtcc cttcaagatt gaaactcagt 180
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acttcttttc ccaccagctg gaagaaagaa ctttcatttg tcttgaaatg agaaaaatgt 780
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<210> 575

<211> 606

<212> DNA

<213> Homo sapiens

<400> 575

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gggaggtgat cggggcagga gtaaagtgga cacctcagca aagccattcg ctgtgatctc 60
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cgccagcatg atctagcagg ccaaatccta atctaccatt ctctgacacc agctgggtccc 180
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tcattctttt cactcctcgt tactcttttt ttttttcaact ctgagccac acaaaactag 360
gaactttgtt attctactta tttttctgta ctctgtctgt ttgcacacag atggatatct 420
gagagccagc gaactttctt tacctcctag tatcatttca tgaaaattag tagcacctgc 480
acaatggggc cttggagaca ggaataaaag gaaaaatctg gaatggaatc acatgacgca 540
acaggctatg aagactccct gcccggtgc tatatgtctg gtaaacagaa taaatagtac 600
ttgagc 606

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<210> 576

<211> 352

<212> DNA

<213> Homo sapiens

<400> 576

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agtttggtct tctgcttcag ttataccatt cagctcattc ttgttttct ttttattgga 180
attatgtgtg gacttctatc ttccaaaagc ctagaagctg agggctgggt ctttgttcat 240
ctttgtgtgc cccattgcac atggaataat acttggaata caaggccggc aacaccatac 300
aagctcagtg aatataattt tgtcatgctt caataaacta atgatatttt at 352

```

<210> 577

<211> 747

<212> DNA

<213> Homo sapiens

<400> 577

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ctaattgagg attacagaaa gaaaaaaagc atttgcttta tttttagacg tgatctctga 60
tgtcttcaac ttttatcggt ctgtttttta ccttagatta ttataaccag ccacctacaa 120
aatctgcaat tttctctaata agtcagcac ctgttaaaaa ggaggttgca caaaacactc 180
ccatttgagc tttggaagga ttattatctg ctttggtctg tgaagtggaa agtcaatgtt 240
cttattcaat ctgtgtctaa tgggtgcatt ttgaggacaa tggaaaacag atcatgtttg 300
attccttaag atgtggccac tgctatttgt ggtacaattt gtgatctgag agctgcatgt 360

```

```

aaaaaacaca  tgagcaaaaa  gaatatccag  cacacaaggg  ctggctttct  gattctcaga  420
ggtatagtga  caacacagct  tacctctgca  ttcaaagaag  ctagaactta  ccgcggataa  480
tcattagtag  aagacagctt  aaagtagtgt  ctgctttctg  gctaggcctg  attcacaggt  540
gctgtgataa  attcaaaaag  acctgcctcc  tctgatgtgc  tagtatcaag  ggtgagggag  600
acagttaacc  aaactgggtca  aaagcattgt  cagcaaagac  ctggtgctga  atcatgttgg  660
gaaactggag  tttggagcta  gagaggcaat  aaccaagtat  caaggtctga  atgtccactt  720
tgtaaccact  gtagtaataa  ttgactc

```

747

<210> 578

<211> 791

<212> DNA

<213> Homo sapiens

<400> 578

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gggcaccatg  ccaagcactt  tcatcattat  ttatacatcg  tcaccacacc  ccctctattc  60
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aacgagaacc  ccagccctgt  ccaggtggct  ccgcgcccag  ggcccaggct  tagcagtgt  180
ccctgcccta  tctttgggaa  aatcttgctt  ttatggctct  cccccctctc  gccctcaaga  240
acaagggcct  tgtgcgtggg  ccttcccatt  gctgctttcc  caagaaggcc  tggattcagg  300
ggagaggcct  tcccagggcc  actcccctta  caccctccca  gaggcctgag  caaccctct  360
ctgggtggtt  tggggctggt  gctgcctggc  ggaaggacag  tgagggcggc  cctagccnnt  420
ccaccctctt  gcgcctctgc  cctctcccag  tccccctgtg  gcttctgaaa  atctcaggga  480
cagatgaggc  tgagccccta  gtcccctctg  tgtgctttga  gcctccagac  tcgaggctgg  540
tactgcagg  tcccagggtg  aatttgga  actggcctgg  ccgctcccat  cctgtaagcc  600
cccaccacgg  ggagaccctc  atccctgccc  ctgtgtggct  gcgcaagtat  tctgcccggc  660
tcccaccatc  agccttcgcc  caagggggcc  ttctgcctct  gcttccctcc  cttctcctct  720
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tatactctga  c

```

791

<210> 579

<211> 764

<212> DNA

<213> Homo sapiens

<400> 579

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cggacgcgtg  ggtttcctag  acacccttg  gccacctttt  tccacctgtt  tttccgagtg  60
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gtcatgggtg  tgctcctcct  gtccctggac  ttctggtctg  tgaagaatgt  aaccggaaga  180
ctcctgggtg  gccttcgatg  gtggaaccag  atagatgaag  atgggaagag  ccaactggatc  240
tttgaagcca  ggaaggtctc  tccgaatagc  attgctgcca  cagaagctga  agcacgaatc  300
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ttttccttga  agctaaagtg  gctggctctg  gtggttgctg  ggatctctct  ccaagctgca  420
aacctgtatg  gctacatcct  ttgtaagatg  ggaggcaaca  gtgacattgg  caaggtcaca  480
gccagtttcc  tgtcccagac  agtgttcag  taggaactga  tgaggttctc  ttcttttgac  540
ggcctcgagg  ggctggagat  tcaccagcat  tgaaaactga  tgaggttctc  ttcttttgac  600
tgatggagat  tacaaaactc  ttggattcct  ggaaaacaag  acgacaggca  tagagtgcta  660
atggcttgct  tacccttgta  cagccctgtc  ctgtgctggg  gagggctgtg  ttttgacagg  720
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764

<210> 580

<211> 746

<212> DNA

<213> Homo sapiens

<400> 580

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ccgtcttccc  caaccaggag  caggcccggg  agctggcaaa  gacgctgggt  ggcggtgggag  60
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gcgtgggcca  cgccctggag  gtggaggagg  cgctgctctg  catggacggc  gcaggcccgc  180
cagacttaag  ggacctgggt  accacgctcg  gggcgccct  gctc*ggctc  agcggacacg  240
cggggactca  ggctcagggc  gctgcccggg  tggccgcggc  gctggacgac  ggctcggccc  300
ttggccgctt  cgagcggatg  ctggcgcgcg  agggcgtgga  tcccggctctg  gcccagagccc  360

```

```

tgtgctcggg aagtccecgca gaacgccggc agctgctgcc tcgcgcccg gagcaggagg 420
agctgctggc gcccgcagat ggcaccgtgg agctgggccg ggcgctgccg ctggcgctgg 480
tgctgcacga gctcggggcc gggcgagcc gcgctgggga gccgctccgc ctgggggtgg 540
gcgcagagct gctggctgac gtgggtcaga ggctgcgccg tgggaccccc tggctccgcg 600
tgcaccggga cggcccccg ctcagcggcc cgagagccg cgcctgcag gaggcgctcg 660
tactctccga ccgcgcgcca ttgcgcgcc cctcgccctt cgcagagctc gttctgcgcg 720
cgcagcaata aagctccttt gccgcg

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746

<210> 581

<211> 665

<212> DNA

<213> Homo sapiens

<400> 581

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cccacgcgtc cggttataaa gaggtcacat agtcgtgtgg gtcgaggatt ctgtgcctcc 60
aggaccaggg gccaccctc tgcccaggga gtccttgctg cccatgagggt cttcccgcaa 120
ggcctctcag acccagatgt gacgggggtgt gtggcccgag gaagctggac agcggcagtg 180
ggcctgctga ggccttctct tgaggcctgt gctctggggg tcccttgctt agcctgtgcc 240
tggaccagct ggctgggggt cctctgaag agacctggc tgctcactgt ccacatgtga 300
actttttcta ggtggcagga caaatcgcg ccatttagag gatgtggctg taacctgctg 360
gatgggactc catagctcct tcccaggacc cctcagctcc ccggcactgc agtctgcaga 420
gttctcctgg aggcaggggc tgctgccttg tttcacctc catgtcaggc cagcctgtcc 480
ctgaaagaga agatggccat gccctccatt tgtaagaaca atgccagggc ccaggaggac 540
cgctgccct gccctgggct tggctgggccc tctggttctg acactttctg ctggaagctg 600
tcaggctggg acaggctttg attttgaggg ttagcaagac aaagcaaata aatgccttcc 660
acctc

```

665

<210> 582

<211> 533

<212> DNA

<213> Homo sapiens

<400> 582

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aaaagaaaaa ctgtaatcca tagccccagg cccaacacct gggctgtctc agctgggaac 60
ttgtttcagg tcgacttggg tttgagtcgt ggcgccagaa cttcacagtt gtgtagtcat 120
ggagaagtca gttaacctca gtgaatctga gcatccagtg agaaaatcct catctccttt 180
atagggatgc tggatgtgtg cctagcacag tgccctggctt gcagacagtg tcccaaaaca 240
gaaccagccc tgaataaatt gtgtgacaca caggcctcag ttcttgaaaa ggcttttagag 300
accaggcatg tggcttatgc ctataatccc agcactttga gaggtgagg ctggaggatc 360
acttgagctc aggagtttga gaccagcctg ggcagcacat tgagactttg tctctaaaaa 420
aaaaaatcaa aaaaattagc gaggcattgt ggcacatgcc tgtggtccca gctaccctgg 480
aggctgaggt gctgagaatt ccagcctggg tgacacagtg agatcttgac tct 533

```

<210> 583

<211> 952

<212> DNA

<213> Homo sapiens

<400> 583

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ctttattcct gtaaataatt ctgtgaaaac taggagaaca gagatgagat ttgacaaaaa 60
aaaattgaaat taaaaataac acagtccttt taaaactaac ataggaaagc ctttctatt 120
atttctcttc ttagcttctc cattgtctaa atcaggaaaa caggaaaaaca cagctttcta 180
gcagctgcaa aatggtttaa tgccccctac atatttccat caccttgaac aatagcttta 240
gcttgggaat ctgagatatg atcccagaaa acatctgtct ctacttcggc tgcaaaaccc 300
atggttttaa tctatatggt ttgtgcattt tctcaactaa aaatrgagat gataatccga 360
attctccata tattcactaa tcaaagacac tattttcata ctagattcct gagacaaata 420
ctcactgaag ggcttggtta aaaataaatt gtgttttggg ctgttcttgt agataatgcc 480
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gtggcaagca gttcttttca gcagattttg cccactattc ctctgagctg aagttctttg 600
catagatttg gcttaagctt gaattagatc cctgcaaagg cttgctctct gatgtcagat 660
gtaattgtaa atgtcagtaa tcacttcatt aacgctaaat gagaatgtaa gtatttttaa 720

```

```

atgtgtgtat ttcaaatttg ttgactaat tctggaatta caagatttct atgcaggatt 780
taccttcate ctgtgcatgt ttcccaaact gtgaggaggg aaggctcaga gatcgagctt 840
ctcctctgag ttctaacaaa atggtgcttt gagggtcagc ctttaggaag gtgcagcttt 900
gttgctcttt gagctttctg ttatgtgcct atcctaataa actcttaaac ac 952

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<210> 584

<211> 661

<212> DNA

<213> Homo sapiens

<400> 584

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ccaaactctc catcaccag gctgtcacga ccaccacca gaggcccagc agcatgacta 60
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gacgctcaga ctcttggcac ataagtctgg agactgctgt gggggtggca gtggctgtca 180
ctgtgctcgg aatcatgatt ttgggactga tctgcctcct cagggtggagg agaaggaaag 240
gtcagcagcg gactaaagcc acaacccag ccagggaacc cttccaaaac acagaggagc 300
catatgagaa tatcaggaat gaaggacaaa atacagatcc caagctaaat cccaaggatg 360
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gccaccgtcc cctcaagagc cccagaacg agaccctgta ctctgtctta aaggcctaac 480
caatggacag cctctcaag actgaatggg gaggccagg acagtggcg acacctgtaa 540
tcccagctac tctgaagcct gaggcagaat caagtgaacc caggagtcca gggccagctt 600
tgataatgga gcgagatgcc atctctagtt aaaaatatat taacaataaa gtaacaaatt 660
t 661

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<210> 585

<211> 422

<212> DNA

<213> Homo sapiens

<400> 585

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gacatcatca acgcctgtg cttcagccct aaccgctact ggctgtgtgc tgccacaggc 180
cccagcatca agatctggga tttagaggga aagatcattg tagatgaact gaagcaagaa 240
gttatcagta ccagcagcaa ggcagaacca cccagtgca cctccctggc ctggtctgct 300
gatggccaga ctctgtttgc tggctacacg gacaacctgg tgcgagtgtg gcaggtgacc 360
attggcacac gctagaagtt tatggcagag ctttacaaaa aaaaaaaaaa ctggcttttc 420
tg 422

```

<210> 586

<211> 924

<212> DNA

<213> Homo sapiens

<400> 586

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ggcttttctt tgtgggctca agagaaggcc atctccctga tgccatctgc atgatccatg 60
ttgagcggtt cacaccagtg ctttctctgc tcttcaatgg tatcatggca ttgatctact 120
tgtgcgtgga agacatcttc cagctcatta actactacag cttcagctac tggttctttg 180
tggggctttc tattgtgggt cagctttatc tgcgctggaa ggagcctgat cgacctcgtc 240
cctcaagct cagcgttttc ttcccagatt tcttctgcct ctgcaccatc ttctgggtgg 300
ctgttccact ttacagtgat actatcaact cctcatcgg cattgccatt gccctctcag 360
gctgcccctt ttacttctc atcatcagag tgccagaaca taagcgaccg ctttacctcc 420
gaaggatcgt ggggtctgcc acaaggtacc tccaggtcct gtgtatgtca gttgctgcag 480
aaatggattt ggaagatgga ggagagatgc ccaagcaacg ggatcccaag tctaactaaa 540
caccatctgg aatcctgatg tggaaagcag gggtttctgg tctactggct agagctaaag 600
aacttgaaaa ggaaagctca cttcttttga ggcacctgtc cagaagcctg gcctaggcag 660
cttcaacctt tgaacttact ttttgaaatg aaaagtaatt tatttgtttt gctacatact 720
gttccagact tttaaagggg acaatgaagg tgactgtggg gaggagcatg tcaggtttgg 780
gcttggttgt tttagaagca cctgggtgtg cctacctact cctcttttct tttaaaaggg 840
cccacaatgc tccaatttcc tgtctccttt agagagacat gaaactatca cagggtgctg 900
atgccataaa aagtttatgt tcct 924

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<210> 587
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 587
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 gtcgagatgt cagagaaaaa gcagccggtg gacttaggtc tgtagagga agacgacgag 120
 tttgaagagt tccctgccga agactgggct ggcttagatg aagatgaaga tgcacatgtc 180
 tgggaggata attgggatga tgacaatgta gaggatgact tctctaata gttacgagct 240
 gaactagaga aacatgggta taagatggag acttcatagc atccagaaga agtgttgaag 300
 taacctaaac ttgacctgct taatacattc tagggcagag aaccaggat gggacactaa 360
 aaaaatgtgt ttatttcatt atctgcttgg atttatttgt gtttttgtaa cacaaaaaat 420
 aaatgttttg atat 434

<210> 588
 <211> 651
 <212> DNA
 <213> Homo sapiens

<400> 588
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 ggcacacag aggagagaca cataagaaag ctctatctg cagccagact cttcaaactg 120
 ccgccaggcc ctgaggccat gtagccaggc ccggaatggg cctctctgga caagagccac 180
 cctttcactg tgcataatgat gctgatgcaa ttcctccatc atctctggac gtgcagacca 240
 gatccagaag aaaggccttg cgtgtggcca aacagcgtga aaccttggca caggactgag 300
 gatcctctcc tccagaaaag cccctcgag gaaataaatt agtgcggttc tctttgacct 360
 ccaaagacaa gacaagcact tatttttatt ttcagaagac aaaagaacca agatgccaac 420
 tggctgcaaa tgctctatct ccagtctgtc tctgtgtact ggtagaggct gggaggagta 480
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 tgcccagagg ccagatgggc ttagctaggc caaagtaaca gactcaagag ttattgtaca 600
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<210> 589
 <211> 552
 <212> DNA
 <213> Homo sapiens

<400> 589
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 ttaagcacta tgtttgtgtt tttatcagta ttatattcat tgtctttgga atacatgttc 180
 ttgtttgtgt ttggaaaaaa aatctctttt accagcttgc actcggaacca acttgaaaaa 240
 aaaaaagctt aaatgttttt gctatgtaca gtttaaaaaat gtgaagtttg tagctttaac 300
 tttttgttaag aaaatctaata aacactggct taagtctga cttgaaatgc tttttgttaa 360
 gggttggtat taagtaatca attgagggtc gcagtttgta tgagacatag cttcctccat 420
 tgccccact ccttttttct tttttaagtt tgagatgctt cctgtgtttt tatgttagaa 480
 ttgttgttct ccttcttttc ttcttctat acctcatcac gtttgtntta aataaactgt 540
 cctttggacc ac 552

<210> 590
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 590
 gctgcgggtt ctggtcttcc tgctatttgt tgggggtgcgg agactaccag ggagtctgag 60
 gatggaagag caccagttcc ggaggagcca gggcagcgaa cacaaagccc cgcattgccg 120
 ggcagggttg gagatcctt ctgcctgcgc agcctggctg gggttgagca gcgggatggc 180
 ccttgctgcc tggctcacga aagccccctg tgggagagcc ccaggcgcgc agggcatgtg 240
 gggtgtggga agagcgggtc cccacgcccc ggtgtgggtg aactcgatag aggagggtga 300


```

caaccaccgg ggggtgctaatt tagtaaccac agtggccttc aaagaactca aatgaaagga 360
agacttgtag gtctctcact ttaagtccag agctagaaat gattaagcct agtgaagatg 420
tagaattttc atagctagag agaagtcaat gcttggcttc aaaacttctt tgaggacca 480
tgcagctggg gactttaagt tacagccagt gctcattgac cactctgaaa atctcaggac 540
ccttaataat tatgcaaaat ctattctttc tgtgctctag aaatggaaca tctactgtctg 600
ggtgacagca catctgttaa tagcatgggtt tactgaatat attaatccca cttattgaga 660
cctactgctc ag

```

672

<210> 591

<211> 720

<212> DNA

<213> Homo sapiens

<400> 591

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agcggccgct cgcgatctag acccaatggt acagtcattg ttggggaatt agttggagca 60
cggcttattg ctcatgcagg ttctctttta aatttggcca agcatgcagc ttctaccgtt 120
cagattcttg gagctgaaaa ggcacttttc agagccctca aatctagacg ggatacccct 180
aagtatggtc tcatttatca tgcttctcct gtgggcccaga caagtcccaa acacaaagga 240
aagatttctc gaatgctggc agccaaaacc gttttggcta tccgttatga tgcttttggg 300
gaggattcaa gttctgcaat gggagttgag aacagagcca aattagaggc caggttgaga 360
actttggaag acagagggat aagaaaaata agtgggaacag gaaaagcatt agcaaaaaca 420
gaaaaatatg aacacaaaag tgaagtgaag acttacgata cttctgggtga ctccacactt 480
ccaacctggt ctaaaaaacg caaaatagaa caggtagata aagaggatga aattactgaa 540
aagaaagcca aaaaagccaa gattaaagtt aaagttgaag aagaggaaga agaaaaagtg 600
gcagaagaag aagaaacatc tgtgaagaag aagaagaaaa ggggtaaaaa gaaacacatt 660
aaggaagaac cactttctga ggaagaacca tgtaccagca cagcaattgc tagtccagag 720

```

<210> 592

<211> 462

<212> DNA

<213> Homo sapiens

<400> 592

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ctcactgctc actgcaacct ctgcctccca ggttcaagca gttctctgtc ttggcctcct 60
gagtagctgg gaccacaggc acacaccacc acgcctggct aatttttgta tttttagtgg 120
agacagagtt tcaccatggt gaccaggctg gcctaaaacc cctgatctca agtaatctgc 180
ctgcctcggc ctccaaagtg ctggaattac aggcgtaagc actgtgccag gccattttca 240
tgctattctt taaatttact tcctttgtaa atgaagacac tattaatcag ttttaatttta 300
atgtgtccaa tagaaactaa atgctaacta tcgattgcat gcttaattac ttttaccttt 360
gtcttaactc tactgttctt tacctaactt tttataacta ctttctgcat ttttgcatct 420
tcattttcca cccatttttg aataataaaa gaaaataaca at

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462

<210> 593

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> linker sequence

<400> 593

gaattcggcc aaagaggcct a

21

<210> 594

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> linker sequence

<400> 594
gaattcggcc ttcatggcct a

21

<210> 595
<211> 8
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<220>
<221> unsure
<222> (7)..(8)

<400> 595
gaattcnn

8

<210> 596
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<220>
<221> unsure
<222> (1)..(9)

<400> 596
nnnnnnnnnc tcgag

15

<210> 597
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<220>
<221> unsure
<222> (1)..(9)

<400> 597
nnnnnnnnng tcgac

15

<210> 598
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<400> 598
acggcctctt tggccctcga gaca

24

US 0982284902P1



Creation date: 03-01-2003

Indexing Officer: ARAHMANYAR - Abdul Rahmanyar

Team: CENTRALSCANPRINT

Dossier: 09822849

Legal Date: 04-09-2001

No.	Doccode	Number of pages
1	PEFR	5

Total number of pages: 5

Remarks:

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